SAMSUNG

ELECTRONICS

SERVICE MANUAL

VP-D30/D30i

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Printed in Korea

AD82-00003A

SAMSUNG

DIGITAL VIDEO CAMCORDER

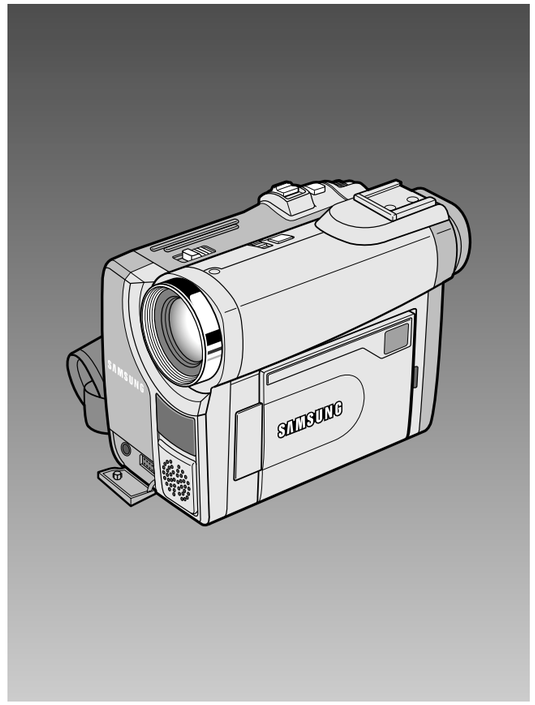
Chassis : Theta

VP-D30/D30i/D39/D39i

SERVICE *Manual*

For mechanical disassembly and adjustment, refer to the “Mechanical Manual” (CSM2000 ⟶ AD68-30200A).

DIGITAL VIDEO CAMCORDER



CONTENTS

1. Precautions

2. Exploded View and Parts List

3. Electrical Parts List

4. Wiring Diagram

5. Schematic Diagrams

1. Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including : control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children --might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

   If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (See Fig. 1-1) :
   Warning : Do not use an isolation transformer during this test. Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

5. With the unit completely reassembled, plug the AC line cord directly the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including : antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

6. X-ray Limits :
   The picture tube is designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original.

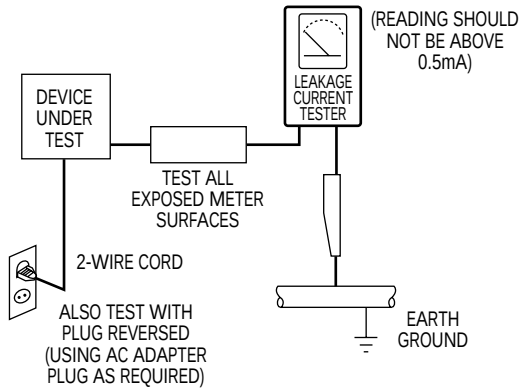

(READING SHOULD NOT BE ABOVE 0.5mA)
LEAKAGE CURRENT TESTER
DEVICE UNDER TEST
TEST ALL EXPOSED METER SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

Fig. 1-1 AC Leakage Test

7. Antenna Cold Check :
   With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong.
   Connect the other lead to the coaxial connector.

8. High Voltage Limit :
   High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits.

   Heed the high voltage limits. These include the X-ray protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

9. Some semiconductor ("solid state") devices are easily damaged by static electricity.
   Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

10. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging Wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

11. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.

12. Design Alteration Warning :
    Never alter or add to the mechanical or electrical design of this unit. Example : Do not add auxiliary audio or video connectors.
    Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

13. Hot Chassis Warning :
    Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

    To confirm that the AC power plug is inserted correctly, do the following : Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.

14. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.

15. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

16. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

17. Observe the original lead dress, especially near the following areas : Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.

18. Picture Tube Implosion Warning :
    The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.

19. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.

20. Product Safety Notice :
    Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

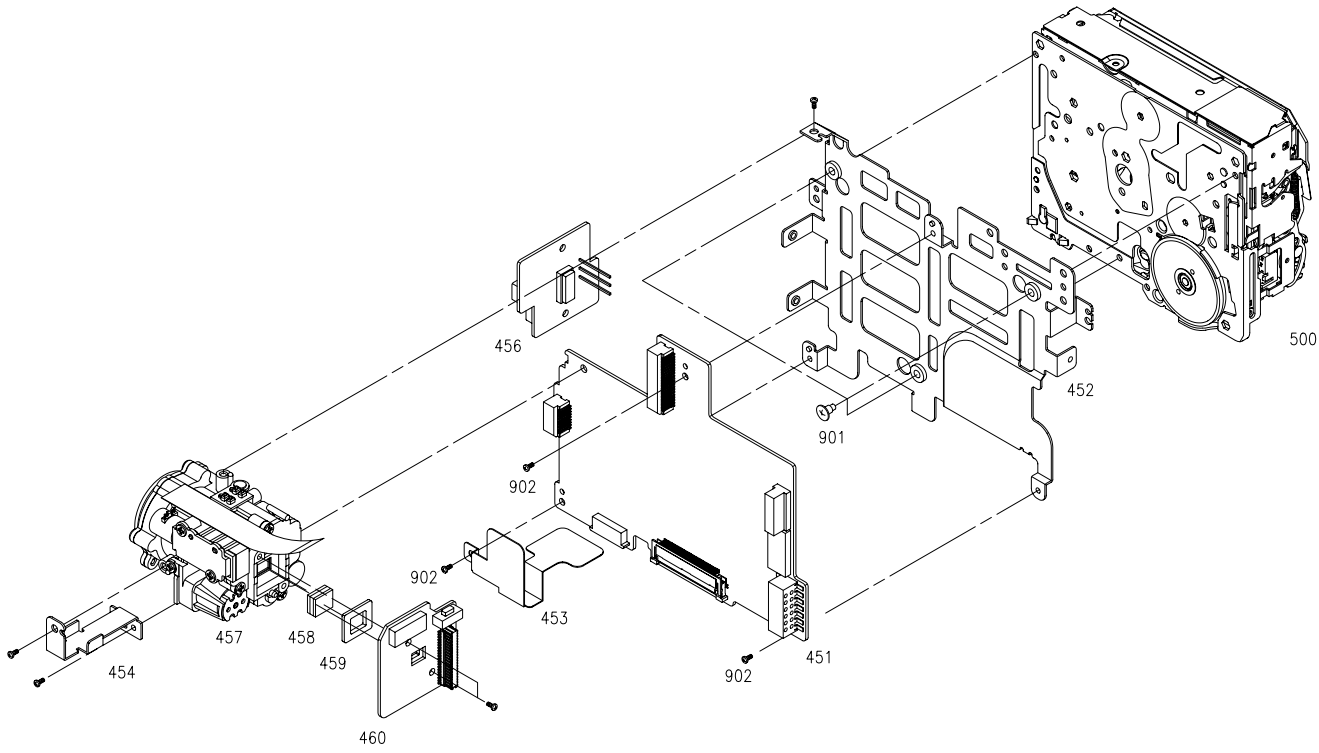
    Components that are critical for safety are indicated in the circuit diagram by shading, (⚠ or ⚠).
    Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

2. Exploded View and Parts List

Page

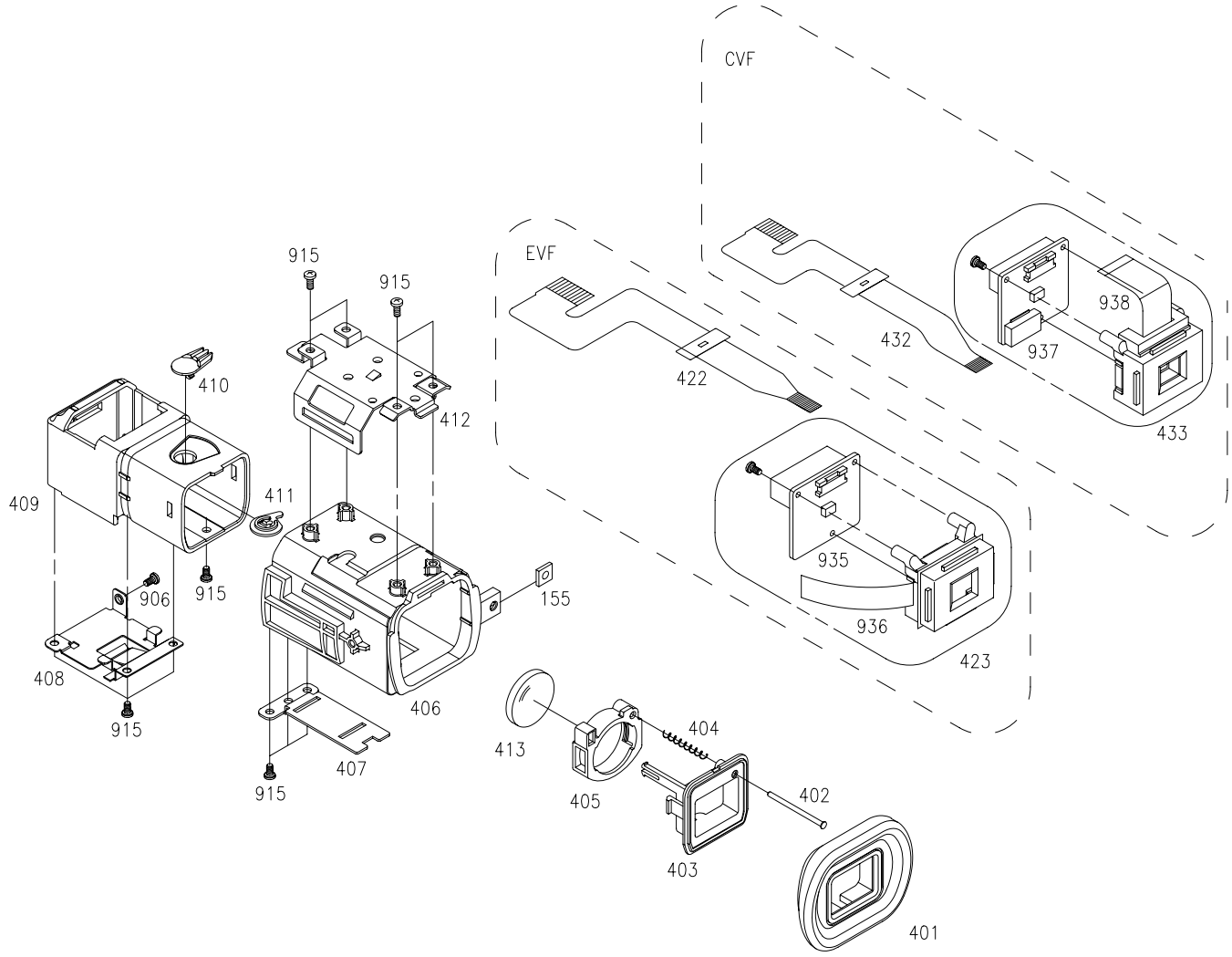
2-1 Ass'y Lens/Deck - - -

2-1 Ass'y Lens/Deck



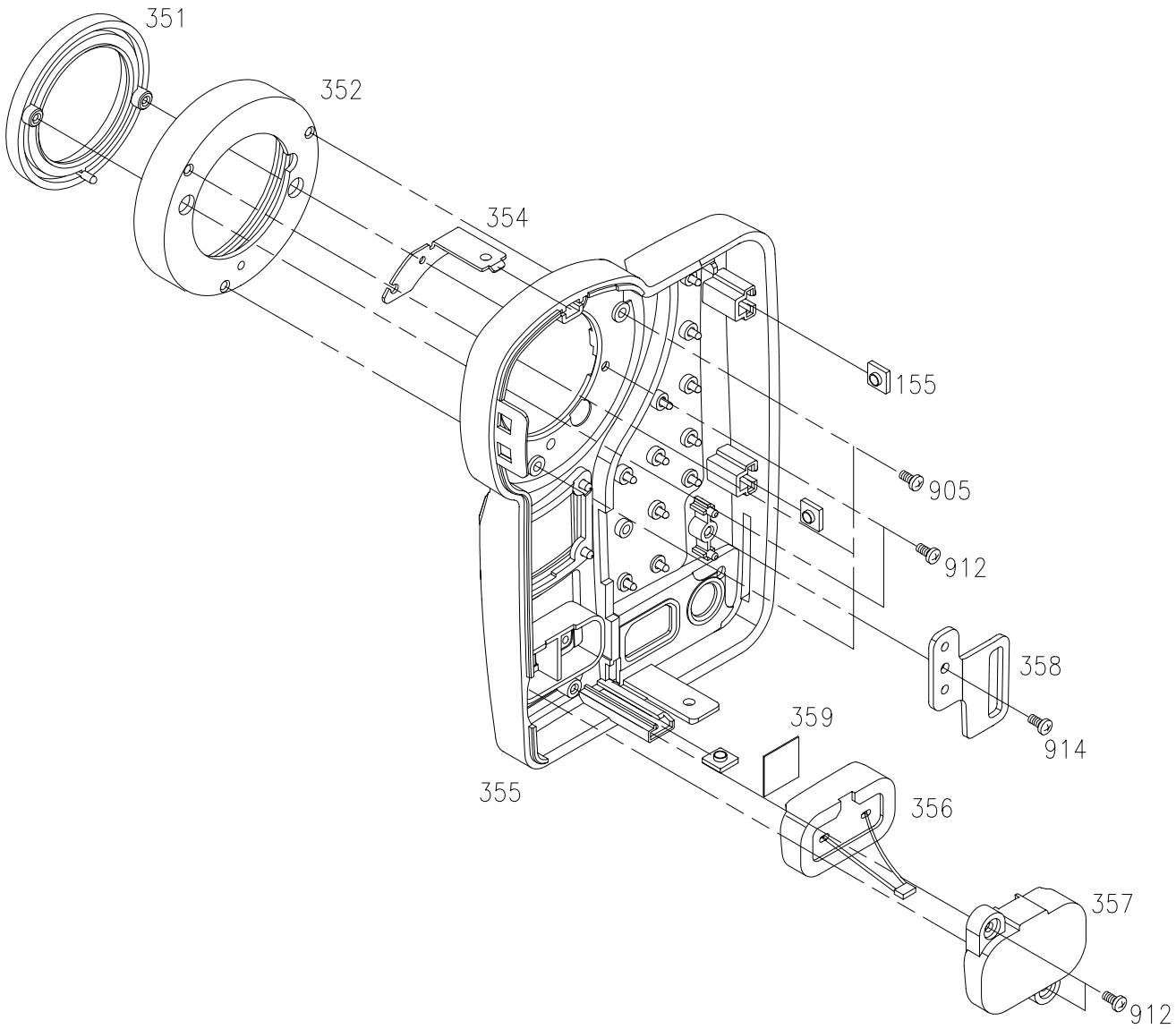
Loc. No	Parts No.	Description ; Specification	Remark
451	AD97-07502C	ASSY-MAIN BOARD;-,VP-D30/XEU,THETA-PJ	
452	AD97-06882A	ASSY-CHASSIS DECK;ASSY,THETA-PJ,-	
453	AD63-00487A	SHIELD-CASE FPC;THETA-PJ,SPTE,T0.25,50,3	
454	AD61-01287A	BRACKET-LENS;THETA-PJ,SUS,T0.5,-,-,-,-	
456	AD97-06757A	ASSY-FRONT BOARD;THETA-PJ,-,-	
457	AD97-04747A	ASSY-LENS;-,DVC10X,SUML	
458	AD29-00019A	FILTER-OPTICAL LPF;-,VP-D73,-,-,3.4X4.5X	
459	AD60-00053A	SPACER-CCD;ALPHA_PJ,SILICON,-,-,-,BLK,-,	
460	AD97-06496A	ASSY-CCD;,THETA-PJ,THETA,ASSY-CCD,PAL	
500	AD97-04896A	ASSY-DECK;-,CSM2000,ALPA,BETA	
901	6009-001284	SCREW-SPECIAL;SWRCH18A,-,CH,+,M1.4,L4.7(	
902	6001-001526	SCREW-MACHINE;CH(0.3),+,M1.7,L3.0,NI PLT	

2-2 Ass'y EVF/CVF



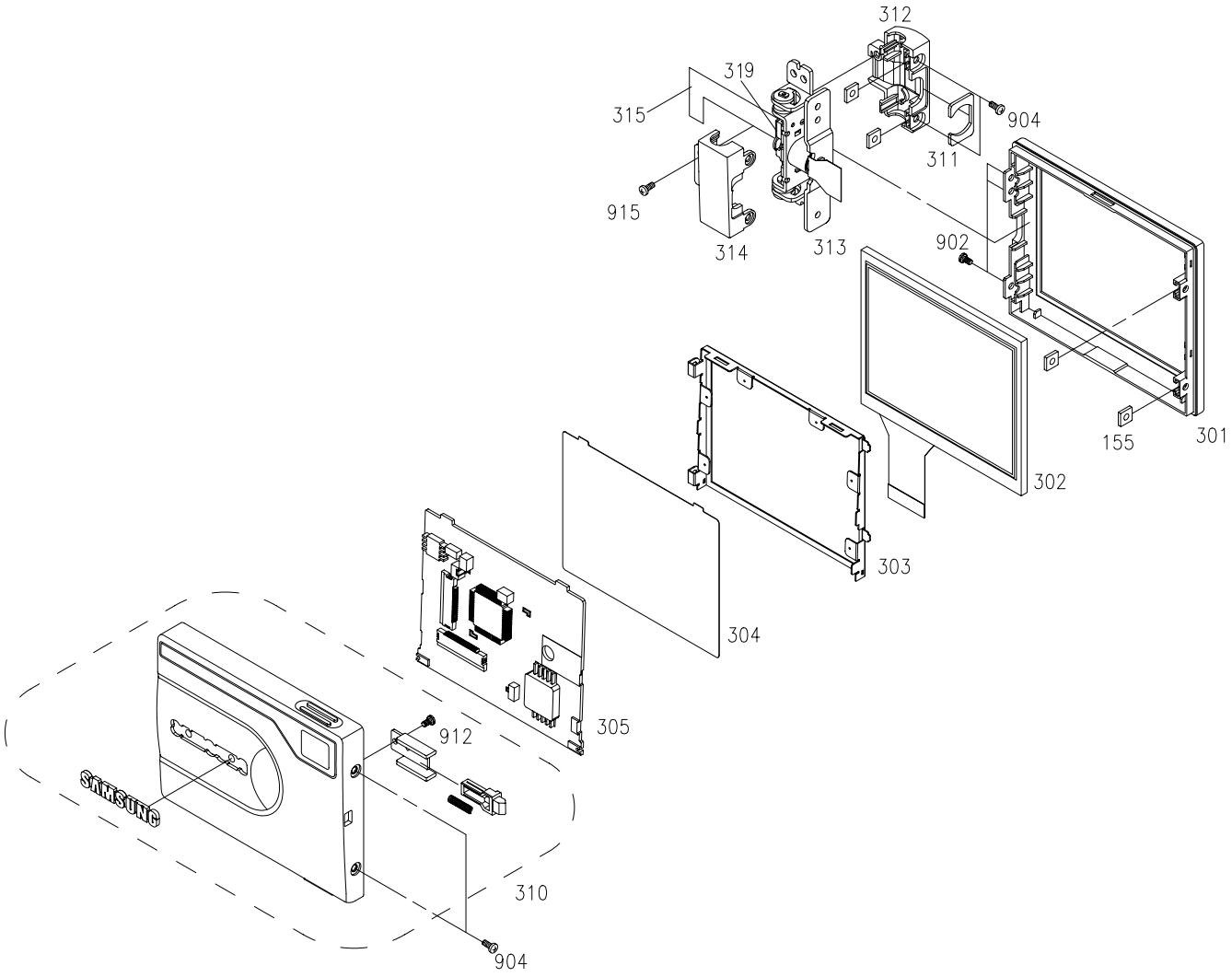
Loc. No	Parts No.	Description ; Specification	Remark
155	AD61-12033A	BRACKET-NUT;SV-D10,T0.8,-,-,-,-,T0.8	
401	AD73-00094B	RUBBER-EYE CUP;THETA-PJ,SILICON,-,-,-,D/	
402	AD66-00233A	SHAFT-EVF LENS;THETA-PJ,SUS,-,-,-,-,-	
403	AD63-00451B	COVER-EYE CUP;THETA-PJ,PC,-,-,-,-,-,G358	
404	AD61-01300A	SPRING ETC-EVF LENS;-,SWPB,-,-,-,-,-,T0.	
405	AD61-01302A	HOLDER-EVF LENS;THETA-PJ,ABS,-,-,-,-,-	
406	AD64-01017A	CASE-EVF BODY;THETA-PJ,PC/ABS,-,-,-,-,-,	
408	AD61-01288A	BRACKET-EVF SLIDE;THETA-PJ,SUS,T0.3,-,-,	
407	AD61-01290A	BRACKET-EVF STOPPER;THETA-PJ,SUS304,T0.5	
409	AD64-01016B	CABINET-EVF SLIDER;THETA-PJ,PC,-,-,-,-,G	
411	AD64-01019A	KNOB-EVF ROTATION;THETA-PJ,POM,-,-,-,-,-	
410	AD64-01018B	KNOB-EVF;THETA-PJ,ABS 94HB,-,-,-,-,G358	
412	AD61-01384A	BRACKET-EVF TOP;THETA-PJ,SUS304,T0.5,-,-	
413	AD67-00194A	LENS-EVF 14X G1;DELTA-PJ,OPT PLASTIC PMM	
422	AD41-00402A	FPC-EVF;THETA-PJ,POLYESTER,1,00,0.3,83	
423	AD97-07159A	ASSY-UNIT-EVF;0.24PAL,DELTA-PJ,UNIT-EVF	
906	6001-001444	SCREW-MACHINE;PH,+,M1.7,L2.0,ZPC(BLK),SW	
915	6003-001292	SCREW-TAPTITE;CH(0.3),+,B,M1.7,L3.0,ZPC(	
935	AD97-06506B	ASSY-EVF BOARD(PAL);DVC,VP-D26,EVF BOARD	
936	AD07-00009A	LCD-PANNEL;-,MCVVQ410(320),VP-D50,0.24IN	

2-3 Ass'y Front



Loc. No	Parts No.	Description ; Specification	Remark
155	AD61-12033A	BRACKET-NUT;SV-D10,T0.8,-,-,-,-,T0.8	
351	AD61-01294A	HOLDER-HOOD;THETA-PJ,ABS 94HB,-,-,-,-,-	
352	AD67-00215A	LENS-HOOD;THETA-PJ,CU,-,-,-,-,-	
354	AD61-01305A	BRACKET-FRONT;THETA-PJ,SUS304,-,-,-,-,-	
355	AD64-01008A	CASE-FRONT;THETA-PJ,ABS 94HB,-,-,-,-,G62	
356	AD97-06753A	ASSY-MIC;,THETA-PJ,MIC ASSY	
357	AD63-00443A	COVER-MIC;THETA-PJ,ABS 94HB,-,-,-,-,-,-,	
358	AD61-01306A	BRACKET-GRIP FRONT;THETA-PJ,SUS304,-,-,-	
359	AD63-00455A	SHEET-MIC;THETA-PJ,-,T0.5,-,-,-,-	
905	6001-000803	SCREW-MACHINE;CH,+,M1.4,L4,ZPC(BLK),SWRC	
912	6003-001291	SCREW-TAPTITE;CH,+,B,M1.4,L3.0,ZPC(BLK),	
914	6003-001245	SCREW-TAPTITE;PH,+,B,M1.7,L3.5,NI PLT,SW	

2-4 Ass'y LCD


312
319
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904
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302
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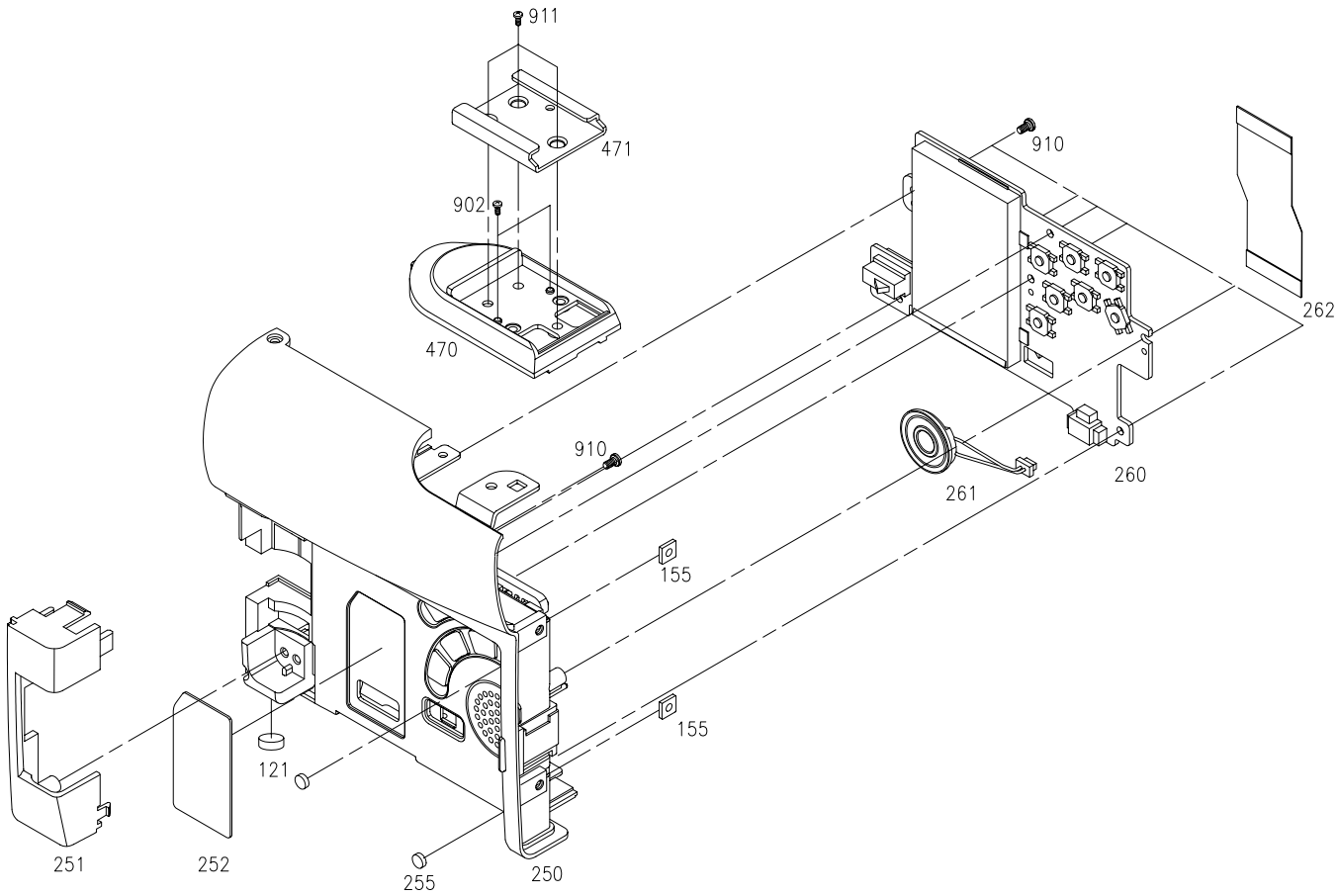
904

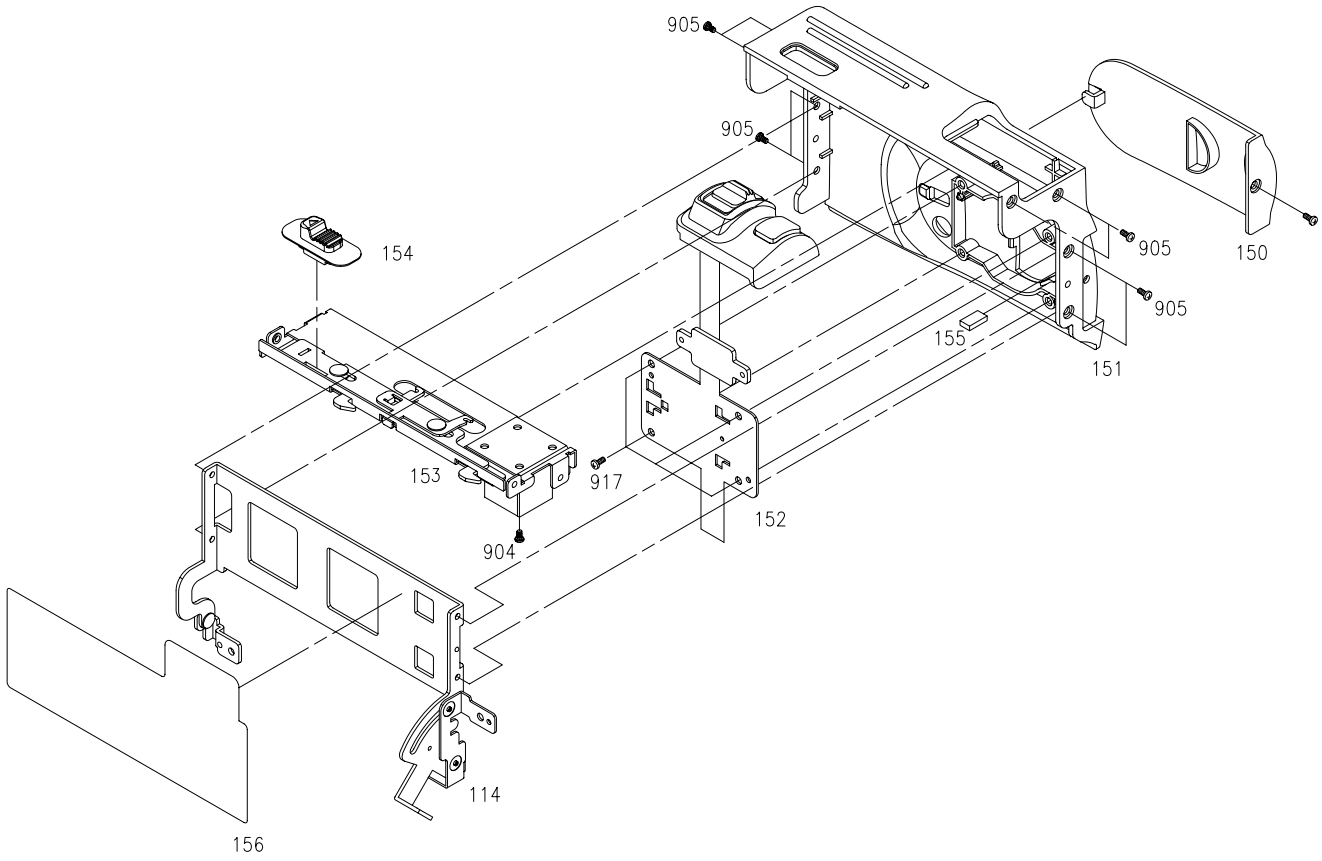
Loc. No	Parts No.	Description ; Specification	Remark
155	AD61-12033A	BRACKET-NUT;SV-D10,T0.8,-,-,-,-,T0.8	
301	AD64-01011A	CASE-LCD BOTTOM;THETA-PJ,PC,-,-,-,-,-,-	
302	AD07-00037A	LCD-PANEL;ACX307AKA,THETA-PJ,-,55*74*46.	
303	AD97-06883A	ASSY-BL;2.5,3T,THETA-PJ,THETA-BL	
304	AD62-00031A	INSULATION;THETA-PJ,BE-CU,-,-,-,-,-,-,-	
305	AD97-06619A	ASSY-LCD BOARD;-,THETA-PJ,THETA,LCD	
310	AD97-07464A	ASSY-CASE LCD;ASSY,VP-D30,PAL	
311	AD63-00291A	COVER-SLIDE;D5-PJ,POLYSLIDE T0.8,-,-,-,-	
312	AD63-00447A	COVER-HINGE BOTTOM;THETA-PJ,ABS,-,-,-,-,	
313	AD97-06877A	ASSY-HINGE;-,THETA-PJ,-	
314	AD63-00449A	COVER-HINGE TOP;THETA-PJ,ABS,-,-,-,-,-,-	
315	AD97-06878A	ASSY-LCD FPC;-,THETA-PJ,-	
319	AD61-00816A	HOLDER-INVERT;D5-PJ,PC GLASS 30%,-,-,-,-	
902	6001-001526	SCREW-MACHINE;CH(0.3),+,M1.7,L3.0,NI PLT	
904	6001-001527	SCREW-MACHINE;CH(0.3),+,M1.7,L2.0,NI PLT	
912	6003-001291	SCREW-TAPTITE;CH,+,B,M1.4,L3.0,ZPC(BLK),	
915	6002-001132	SCREW-TAPPING;BH,T0.5,+,2,M1.7,L3.0,BLK,	

2-5 Ass'y Left



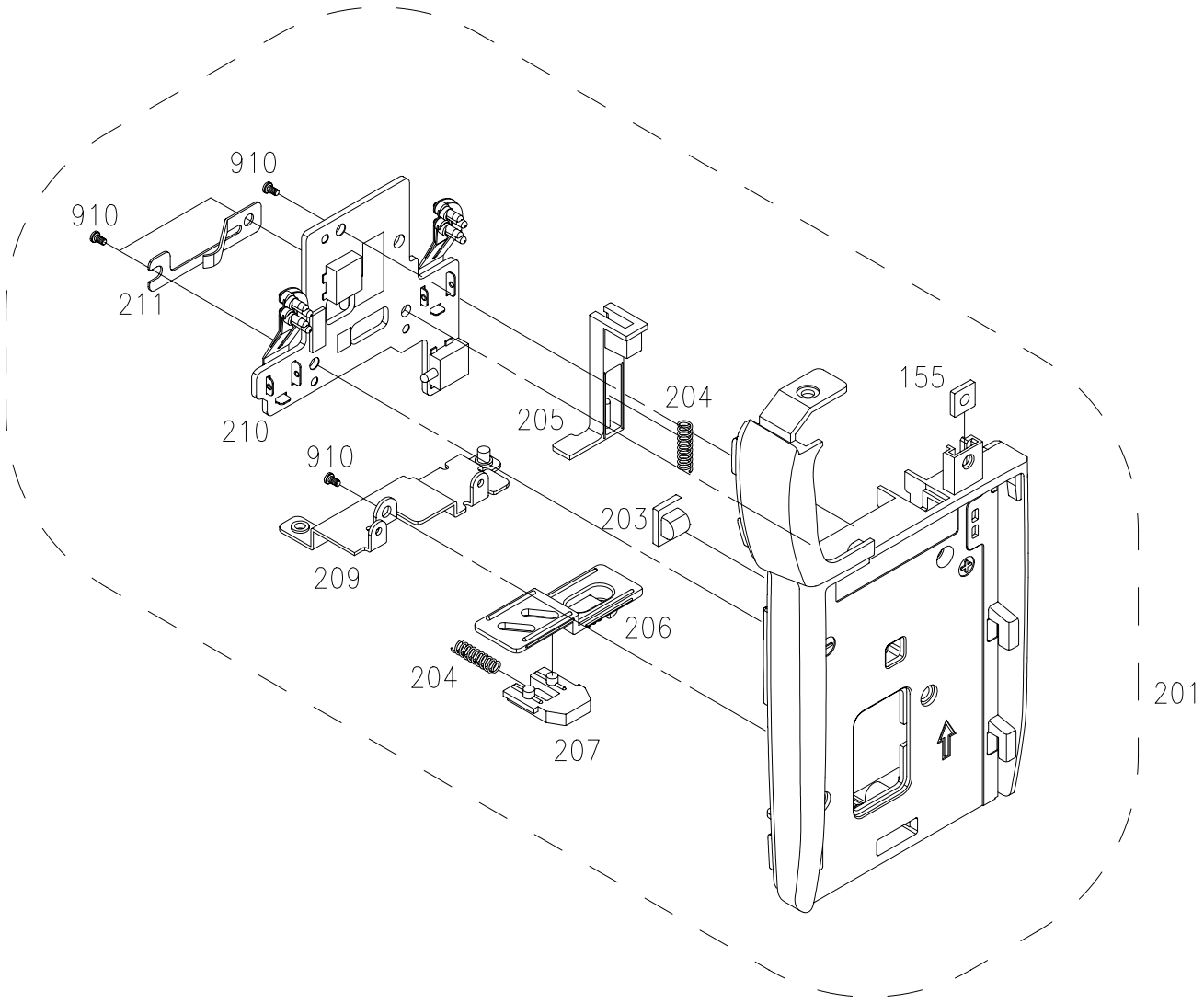
Loc. No	Parts No.	Description ; Specification	Remark
121	AD69-00454A	PAD-LEG;THETA-PJ,T0.9,PI 4,	
155	AD61-12033A	BRACKET-NUT;SV-D10,T0.8,-,-,-,-,T0.8	
250	AD97-07012A	ASSY-CASE LEFT;ASSY,THETA-PJ,EXP,MS-NOTH	
251	AD63-00439A	COVER-LEFT;THETA-PJ,ABS,-,-,-,-,-,G4092B	
252	AD64-01009B	INLAY-M/S;THETA-PJ,PC,T0.9,-,-,-,NON M/S	
255	AD69-00263B	PAD-HOUSING;D5-PJ,PORON(HH-48)L/GRAY,T0.	
260	AD97-06961A	ASSY-FUNCTION BOARD;THETA-PJ,-,DSC(X)	
261	AD97-04289A	ASSY-SPEAKER;-,D5-PJ,G-17S08-0823	
262	AD97-06955A	ASSY-FUNCTION FPC;ASSY,THETA-PJ,-	
470	AD63-00438A	COVER-TOP;THETA-PJ,ABS 94HB,-,-,-,-,-,G6	
471	AD61-01385A	BRACKET-ACC SHOE;THETA-PJ,SUS304,T0.8,-,	
902	6001-001526	SCREW-MACHINE;CH(0.3),+,M1.7,L3.0,NI PLT	
910	6003-001453	SCREW-TAPTITE;BH,+,B,M1.7,L4,ZPC(BLK)	
911	6003-001445	SCREW-TAPTITE;PH,+,B,M2,L5,ZPC(BLK)	

2-6 Ass'y Cover Housing



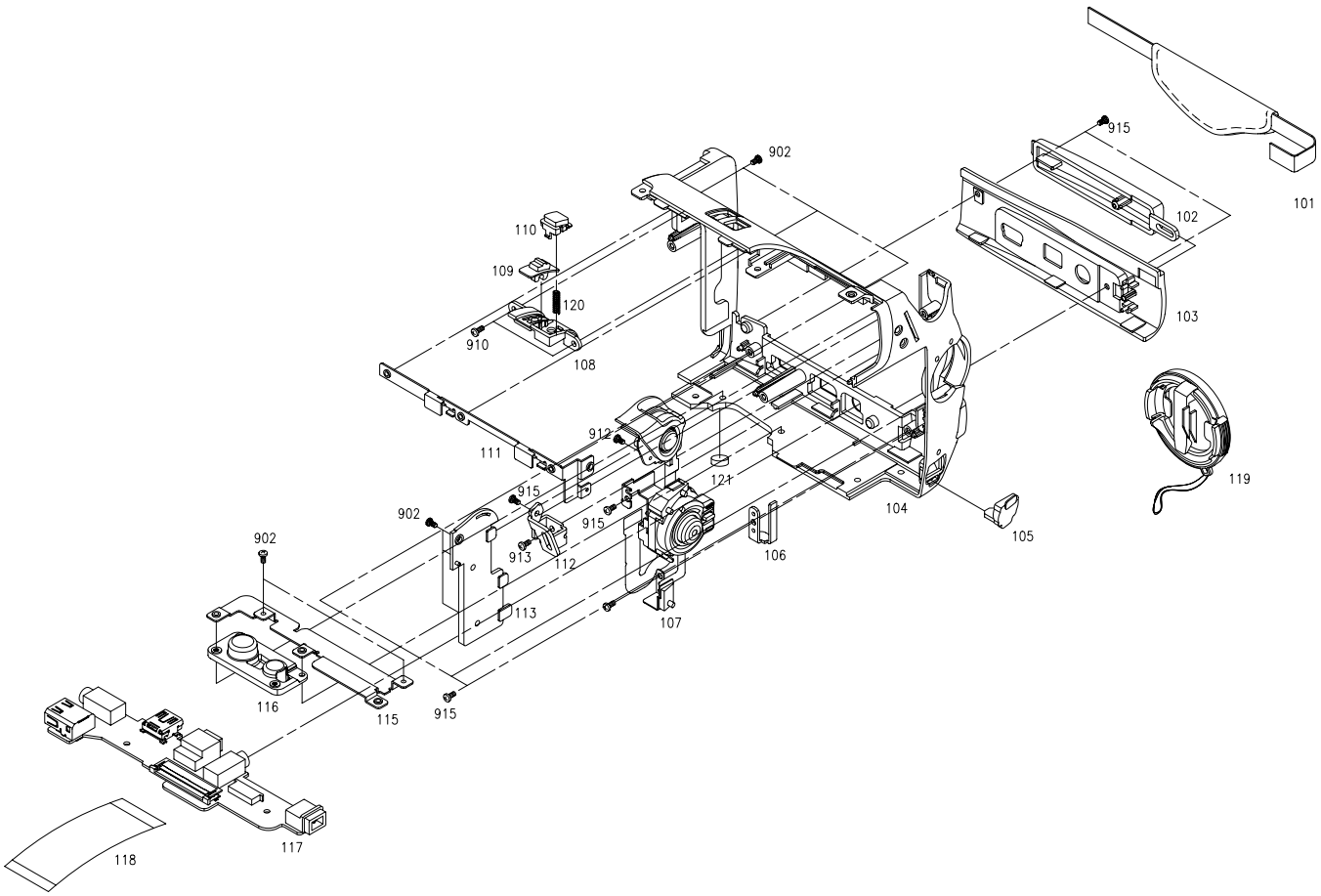
Loc. No	Parts No.	Description ; Specification	Remark
114	AD97-06875A	ASSY-LINK HOUSING BOTTOM;-,THETA-PJ,-	
150	AD63-00457A	COVER-DUMMY HOUSING;THETA-PJ,ABS,-,-,-,-	
151	AD63-00458C	COVER-HOUSING;THETA-PJ,ABS 94HB,-,-,-,-,	
152	AD97-06772A	ASSY-ZOOM;ABS 94HB,THETA-PJ,-	
153	AD97-06874A	ASSY-LINK HOUSING TOP;-,THETA-PJ,-	
154	AD64-01026A	KNOB-TAPE EJECT;THETA-PJ,ABS,-,-,-,-,-,-	
155	AD61-12033A	BRACKET-NUT;SV-D10,T0.8,-,-,-,-,T0.8	
156	AD63-00483A	SHEET-HOUSING;THETA-PJ,PVC,T0.2,-,-,-,-	
904	6001-001527	SCREW-MACHINE;CH(0.3),+,M1.7,L2.0,NI PLT	
905	6001-000803	SCREW-MACHINE;CH,+,M1.4,L4,ZPC(BLK),SWRC	
917	6003-001292	SCREW-TAPTITE;CH(0.3),+,B,M1.7,L3.0,ZPC(	

2-7 Ass'y Rear



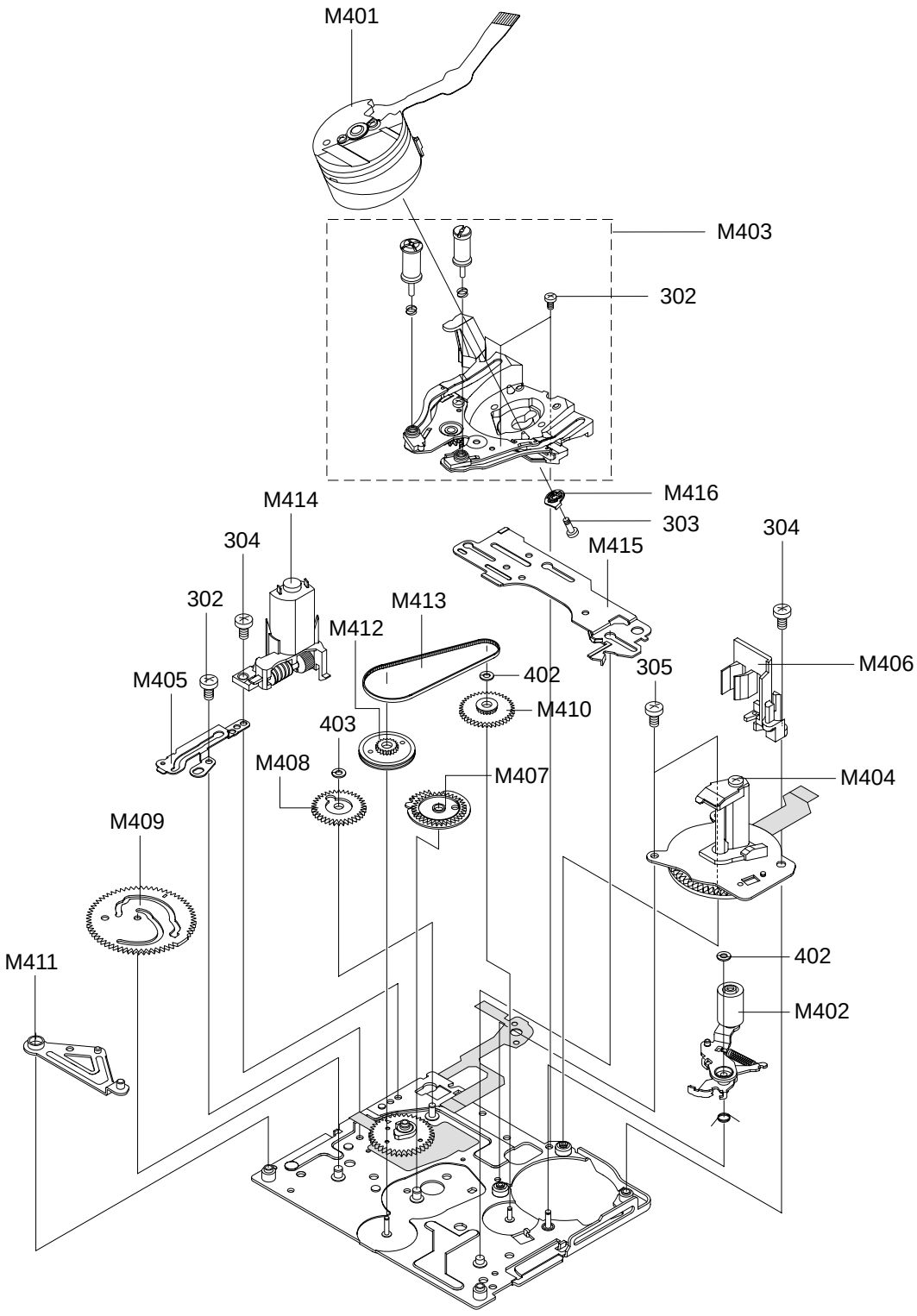
Loc. No	Parts No.	Description ; Specification	Remark
155	AD61-12033A	BRACKET-NUT;SV-D10,T0.8,-,-,-,-,T0.8	
201	AD97-07358A	ASSY-REAR;ASSY,THETA-PJ,D/GRAY	
203	AD61-01303B	STOPPER-BATTERY;THETA-PJ,ABS 94HB,-,-,-,	
204	AD61-01301A	SPRING ETC-BATTERY EJECT;-,SWPB,-,-,-,-,	
205	AD64-01022B	KNOB-DETECT;THETA-PJ,ABS 94HB,-,-,-,-,G3	
206	AD64-01021B	KNOB-EJECT BATTERY;THETA-PJ,ABS 94HB,-,-	
207	AD64-01023B	KNOB-RELEASE BATTERY;THETA-PJ,ABS 94HB,-	
209	AD61-01395A	BRACKET-BATTERY EJECT;OMEGA-PJ,SUS304 1/	
210	AD97-06954A	ASSY-TERMINAL FPC;ASSY,THETA-PJ,-	
211	AD61-01304A	SPRING ETC-STOPPER;THETA-PJ,C5210R-H,-,-	
910	6003-001453	SCREW-TAPTITE;BH,+,B,M1.7,L4,ZPC(BLK)	

2-8 Ass'y Right



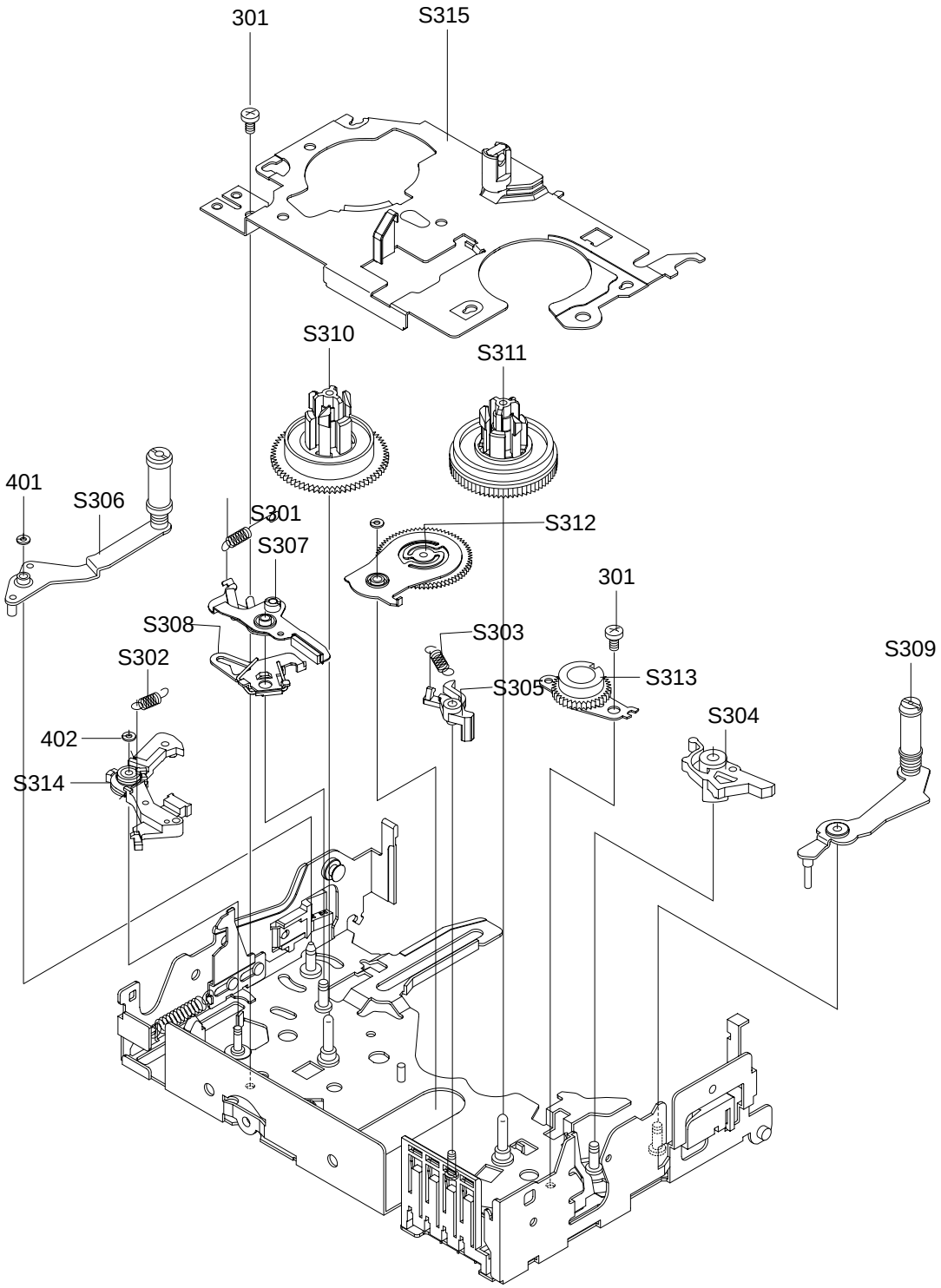
Loc. No	Parts No.	Description ; Specification	Remark
101	AD59-00103A	UNIT-BELT GRIP;THETA-PJ,-,LEATHER,-,-,-	
102	AD63-00464B	COVER-JACK RIGHT;THETA-PJ,TPR,-,-,-,-,-	
103	AD63-00456B	COVER-DUMMY RIGHT;THETA-PJ,AS94HB,-,-,-	
104	AD64-01035A	CASE-RIGHT;THETA-PJ,ABS,-,-,-,-,-,-	
105	AD63-00463A	COVER-DC JACK;THETA-PJ,TPR,-,-,-,-,-,-,-	
106	AD61-01307A	BRACKET-GRIP BACK;THETA-PJ,SUS,T0.8,-,-	
107	AD97-06873A	ASSY-POWER;-,THETA-PJ,-	
108	AD61-01324A	HOLDER-NITE SHOT;THETA-PJ,ABS 94HB,-,-,-	
109	AD64-01025A	KNOB-NITE SHOE;THETA-PJ,ABS,-,-,-,-,-,-	
110	AD64-01034A	BUTTON-SLOW SHOT;THETA-PJ,ABS,-,-,-,-	
111	AD61-01309A	BRACKET-RIGHT;THETA-PJ,SUS,T0.5,-,-,-,-	
112	AD61-01310A	BRACKET-SHOULDER;THETA-PJ,SUS,T0.8,-,-,-	
113	AD63-00459A	COVER-POWER;THETA-PJ,ABS,-,-,-,-,-,-,-	
115	AD61-01396A	BRACKET-JACK PCB;OMEGA-PJ,SUS 304 1/2H,T	
116	AD61-01222B	HOLDER-TRIPOD;THETA-PJ,AL,-,-	
117	AD97-06210B	ASSY-JACK BOARD;THETA-PJ,VP-D30,USB(X)	
118	AD41-00400A	FPC-JACK;THETA-PJ,POLYESTER,1,00,0.3,38	
119	AD97-07354A	ASSY-CAP HOOD;ASSY,THETA-PJ,D/GRAY	
120	AD61-01394A	SPRING ETC-SLOW SHOT;THETA-PJ,SWPB,-,-,-	
121	AD69-00454A	PAD-LEG;THETA-PJ,T0.9,PI 4,	
902	6001-001526	SCREW-MACHINE;CH(0.3),+,M1.7,L3.0,NI PLT	
910	6003-001453	SCREW-TAPTITE;BH,+,B,M1.7,L4,ZPC(BLK)	
912	6003-001291	SCREW-TAPTITE;CH,+,B,M1.4,L3.0,ZPC(BLK),	
913	6002-001085	SCREW-TAPPING;CH,+,2,M1.7,L5,ZPC(BLK),SW	
915	6002-001132	SCREW-TAPPING;BH,T0.5,+,2,M1.7,L3.0,BLK,	

2-9 Mechanical Parts (1) (Main Chassis)



Loc. No	Parts No.	Description ; Specification	Remark
302	6001-001452	SCREW-MACHINE;BH,+,M1.4,L2.5,BLK,SWRCH18	
303	6001-001451	SCREW-MACHINE;TH,+,M1.4,L4.12,ZPC(YEL),S	
304	6001-001331	SCREW-MACHINE;BH,+,M1.4,L3.0,BLK(LOCK),S	
305	AC60-12113A	SCREW;-,BLK,L2.2,S45C-HC,BH,+,-,M1.4	
402	6031-001417	WASHER-PLAIN;POLYSLIDE,-,ID0.8,D3.0,T0.2	
403	6031-001419	WASHER-PLAIN;LUMINA,CUT,ID1.1,OD2.8,T0.2	
M401	AD97-02552A	ASSY-DRUM REV02;AHS+R/T+MOT+PBT,DD-3,ASS	
M402	AD97-02928A	ASSY-ARM-PINCH-FULL;-,DD-3,-	
M403	AD97-02931A	ASSY-DRUM BASE RAIL;-,DD-3,-	
M404	AD31-00028A	MOTOR-CAPSTAN;-,DD-3,-,-,-,-,-,-,-,-,-	
M405	AD61-00490A	GUIDE-TENSION CAM;DD-3,SUS430 CP,T0.3,-,	
M406	AD61-00496A	HOLDER-FPC SUB;DD-3,DURACON,-,-,-,-	
M407	AD66-00061A	GEAR-CONNECT;DD-3,POM,0.4/0.5,8.5/23,-,-	
M408	AD66-00064A	GEAR-WHEEL;DD-3,POM,0.3/05,30/8,-,-,PCD	
M409	AD66-00065A	GEAR CAM-MAIN;DD-3,SECC,0.5,50,-,-,PCD 2	
M410	AD66-00069A	GEAR-CAPSTAN;DD-3,DYAMID,0.4,28,-,-,PCD	
M411	AD66-00085A	LEVER-CAM;DD-3,SUS430 CP,T0.5,-,-,-,-,-	
M412	AD66-00098A	GEAR-PULLEY ASSY;DD-3,POM+MAGNET,-,-,-,-	
M413	AD66-62001A	BELT-TIMING;DD-C2R,POLYURETHAN,-,L84,-,-	
M414	AD97-02935A	ASSY-LOADING-MOTOR;-,DD-3,-	
M415	AD97-02987A	ASSY-SLIDE-MAIN;-,DD-3,-	
M416	AD61-00558A	PLATE-S/P BASE;DD-3,SUS632 CSP ,T0.15,-,	

2-10 Mechanical Parts (2) (Sub Chassis)



Loc. No	Parts No.	Description ; Specification	Remark
301	6001-001513	SCREW;BH,+,M1.4,D3.0 , WH	
401	6031-001430	WASHER-PLAIN;POLYSLIDER,-,ID0.8,D2.5,T0.	
402	6031-001417	WASHER-PLAIN;POLYSLIDE,-,ID0.8,D3.0,T0.2	
S301	AD61-00509A	SPRING-TENSION;DD-3,SUS304-WPB,•'0.12,-,	
S302	AD61-00513A	SPRING-BRAKE S;DD-3,SUS304-WPB,•'0.18,-,	
S303	AD61-00659A	SPRING-MAIN BRAKE T;DD-3,SWP-B,•'0.16,-,	
S304	AD66-00090A	LEVER-EJECT;DD-3,POM,-,-,-,-,-,-	
S305	AD66-00093A	BRAKE-MAIN T;DD-33,NYLON,-,-,-,-	
S306	AD66-00108A	ARM-TENSION-ASSY;DD-3,SUS304 CP+ETC,-,-,	
S307	AD97-02932A	ASSY-BRAKE-TENSION;-,DD-3,-	
S308	AD97-02933A	ASSY-RELEASE-T;-,DD-3,-	
S309	AD97-02934A	ASSY-REVIEW-ARM;-,DD-3,-	
S310	AD97-02938A	ASSY-REEL-DISK-S;-,DD-3,-	
S311	AD97-02939A	ASSY-REEL-DISK-T;-,DD-3,-	
S312	AD97-02940A	ASSY-IDLER;-,DD-3,-	
S313	AD97-02941A	ASSY-BRAKE-PULLEY;-,DD-3,-	
S314	AD97-02942A	ASSY-BRAKE-S;-,DD-3,-	
S315	AD97-05350A	ASSY-COVER REEL;SUS+ETC,CSM2000	

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3. Electrical Parts List

Loc.No	Part No	Description ; Specification	Remark
451	**AD97-07502C**	**ASSY-MAIN BOARD;-,VP-D30/XEU,THETA-PJ**	
C111	2203-005344	C-CERAMIC,CHIP;22nF,10%,25V,X7R,TP,1005,	
C112	2203-005344	C-CERAMIC,CHIP;22nF,10%,25V,X7R,TP,1005,	
C113	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C114	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C116	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C117	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C118	2203-002487	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005	
C120	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C121	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C122	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C123	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C124	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C201	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C203	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C206	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C208	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C209	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C210	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C211	2203-005627	C-CERAMIC,CHIP;470NF,10%,10V,X5R,TP,1608	
C215	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C216	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C217	2203-006006	C-CERAMIC,CHIP;0.005NF,°æ0.25PF,50V,C0G,	
C218	2203-006006	C-CERAMIC,CHIP;0.005NF,°æ0.25PF,50V,C0G,	
C221	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C222	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C223	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C224	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C227	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C228	2203-006006	C-CERAMIC,CHIP;0.005NF,°æ0.25PF,50V,C0G,	
C229	2203-006006	C-CERAMIC,CHIP;0.005NF,°æ0.25PF,50V,C0G,	
C230	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C231	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C232	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C233	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C234	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C310	2404-001247	C-TA,CHIP;22UF,20%,4V,WT,TP,2012	
C311	2404-001254	C-TA,CHIP;220UF,20%,2.5V,-,TP,3.5(L)X2.8	
C312	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C313	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
C314	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C315	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C316	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C317	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C318	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C319	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C320	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C321	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C322	2404-001254	C-TA,CHIP;220UF,20%,2.5V,-,TP,3.5(L)X2.8	
C323	2404-001247	C-TA,CHIP;22UF,20%,4V,WT,TP,2012	
C324	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C325	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C327	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C328	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C329	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C501	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C502	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C503	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C504	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C505	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C506	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C507	2203-000585	C-CERAMIC,CHIP;220pF,10%,50V,X7R,TP,1005	
C508	2404-001257	C-TA,CHIP;1UF,20%,16V,-,TP,2012	
C509	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C510	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C511	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C512	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C513	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C514	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C601	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C602	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C603	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C605	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C606	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C607	2203-005627	C-CERAMIC,CHIP;470NF,10%,10V,X5R,TP,1608	
C608	2203-005627	C-CERAMIC,CHIP;470NF,10%,10V,X5R,TP,1608	
C609	2203-005627	C-CERAMIC,CHIP;470NF,10%,10V,X5R,TP,1608	
C610	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C611	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C612	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528,-	
C613	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C616	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C617	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C618	2203-002487	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005	
C619	2203-005481	C-CERAMIC,CHIP;47nF,10%,10V,X7R,TP,1005,	
C620	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C621	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
C622	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C623	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C624	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C625	2203-006047	C-CERAMIC,CHIP;33NF,10%,16V,X7R,TP,1005	
C626	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C627	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C628	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C629	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C630	2203-000489	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,1005	
C631	2203-000489	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,1005	
C701	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C702	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C703	2404-000335	C-TA,CHIP;3.3uF,20%,16V,GP,TP,3216	
C705	2203-000714	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,1005	
C706	2203-002717	C-CERAMIC,CHIP;10nF,+80-20%,50V,Y5V,TP,1	
C707	2203-002717	C-CERAMIC,CHIP;10nF,+80-20%,50V,Y5V,TP,1	
C708	2203-002982	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,1005	
C709	2203-002717	C-CERAMIC,CHIP;10nF,+80-20%,50V,Y5V,TP,1	
C710	2203-002717	C-CERAMIC,CHIP;10nF,+80-20%,50V,Y5V,TP,1	
C711	2203-002982	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,1005	
C712	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C713	2203-002717	C-CERAMIC,CHIP;10nF,+80-20%,50V,Y5V,TP,1	
C714	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C715	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C716	2203-000330	C-CERAMIC,CHIP;0.012NF,5%,50V,C0G,TP,100	
C717	2203-000330	C-CERAMIC,CHIP;0.012NF,5%,50V,C0G,TP,100	
C718	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C719	2203-002717	C-CERAMIC,CHIP;10nF,+80-20%,50V,Y5V,TP,1	
C720	2203-002717	C-CERAMIC,CHIP;10nF,+80-20%,50V,Y5V,TP,1	
C721	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C722	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C723	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C724	2203-002717	C-CERAMIC,CHIP;10nF,+80-20%,50V,Y5V,TP,1	
C725	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
C726	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C727	2203-002717	C-CERAMIC,CHIP;10nF,+80-20%,50V,Y5V,TP,1	
C841	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C842	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C844	2404-001257	C-TA,CHIP;1UF,20%,16V,-,TP,2012	
C845	2203-002487	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005	
C847	2404-001257	C-TA,CHIP;1UF,20%,16V,-,TP,2012	

Loc.No	Part No	Description ; Specification	Remark
C848	2203-002487	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005	
C851	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C852	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C853	2404-001244	C-TA,CHIP;4.7UF,20%,6.3V,-,TP,2012	
C854	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C855	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C856	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C857	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C858	2404-001244	C-TA,CHIP;4.7UF,20%,6.3V,-,TP,2012	
C859	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C860	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C861	2404-001244	C-TA,CHIP;4.7UF,20%,6.3V,-,TP,2012	
C862	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
C863	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C864	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C865	2203-000560	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,	
C866	2203-000560	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,	
C867	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C868	2203-005061	C-CERAMIC,CHIP;100nF+80-20%,16V,Y5V,TP,	
C869	2404-001257	C-TA,CHIP;1UF,20%,16V,-,TP,2012	
C870	2203-000560	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,	
C871	2203-000560	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,	
C872	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C873	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C874	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C875	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C881	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C882	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C884	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C885	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C901	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C902	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C903	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C904	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C905	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C906	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C907	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C908	2203-002717	C-CERAMIC,CHIP;10nF,+80-20%,50V,Y5V,TP,1	
C909	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C910	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
C911	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C912	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C913	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C914	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C915	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C916	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C917	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C919	2203-006078	C-CERAMIC,CHIP;10000NF,20%,16V,X5R,TP,32	
C921	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C923	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C924	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C925	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C926	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C927	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C928	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C929	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C930	2203-005922	C-CERAMIC,CHIP;4700NF,20%,6.3V,X5R,TP,20	
C931	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C933	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C934	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528,-	
C936	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C937	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528,-	
C938	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C940	2203-005921	C-CERAMIC,CHIP;10000NF,20%,4V,X5R,TP,201	
C941	2404-001247	C-TA,CHIP;22UF,20%,4V,WT,TP,2012	
C942	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C946	2203-005921	C-CERAMIC,CHIP;10000NF,20%,4V,X5R,TP,201	
C947	2404-001247	C-TA,CHIP;22UF,20%,4V,WT,TP,2012	
C949	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C950	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C952	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C954	2203-005922	C-CERAMIC,CHIP;4700NF,20%,6.3V,X5R,TP,20	
C955	2404-001246	C-TA,CHIP;10UF,20%,6.3V,WT,TP,2012	
C957	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C958	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C959	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C960	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C961	2203-005922	C-CERAMIC,CHIP;4700NF,20%,6.3V,X5R,TP,20	
C962	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C964	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C965	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C966	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C969	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C971	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C976	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C977	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C980	2203-005061	C-CERAMIC,CHIP;100nF+80-20%,16V,Y5V,TP,	
C985	2404-000335	C-TA,CHIP;3.3uF,20%,16V,GP,TP,3216	
CA01	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA02	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA03	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA04	2404-001250	C-TA,CHIP;47UF,20%,4V,-,TP,3216	
CA05	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA06	2404-001250	C-TA,CHIP;47UF,20%,4V,-,TP,3216	
CA07	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA08	2404-001250	C-TA,CHIP;47UF,20%,4V,-,TP,3216	
CA09	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA12	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA13	2203-000812	C-CERAMIC,CHIP;0.033NF,5%,50V,C0G,TP,100	
CA14	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA15	2203-000330	C-CERAMIC,CHIP;0.012NF,5%,50V,C0G,TP,100	
CA16	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA17	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA18	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA19	2203-002443	C-CERAMIC,CHIP;0.33nF,10%,50V,X7R,TP,100	
CA20	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA23	2203-006006	C-CERAMIC,CHIP;0.005NF,°æ0.25PF,50V,C0G,	
CA31	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA32	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
CA33	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA34	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA35	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA40	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CA90	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
CA91	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CN101	3708-001235	CONNECTOR-FPC/FFC/PIC;10P,0.5mm,SMD-A,SN	
CN301	3708-001712	CONNECTOR-FPC/FFC/PIC;17P,0.3MM,SMD-A,SN	
CN302	3708-001626	CONNECTOR-FPC/FFC/PIC;38P,0.5MM,SMD-A,SN	
CN303	3711-005012	CONNECTOR-HEADER;BOX,40P,2R,0.5MM,SMD-S,	
CN601	3708-001215	CONNECTOR-FPC/FFC/PIC;18P,0.5mm,SMD-A,SN	
CN602	3708-001498	CONNECTOR-FPC/FFC/PIC;19P,0.5mm,SMD-A,SN	
CN603	3708-001236	CONNECTOR-FPC/FFC/PIC;10P,0.5mm,SMD-A,SN	
CN604	3708-001816	CONNECTOR-FPC/FFC/PIC;11P,0.5MM,SMD-A,TI	
CN701	3710-001466	CONNECTOR-SOCKET;20P,2R,0.5mm,SMD-S,AUF	
CN702	3708-001130	CONNECTOR-FPC/FFC/PIC;12P,0.5mm,SMD-S,SN	
CN703	3708-001111	CONNECTOR-FPC/FFC/PIC;14P,0.5mm,SMD-A,SN	
CN704	3711-004241	CONNECTOR-HEADER;BOX,18P,2R,1MM,SMD-A,SN	
CN705	3711-004239	CONNECTOR-HEADER;BOX,18P,2R,0.8MM,SMD-A,	
CNP01	3710-000554	CONNECTOR-SOCKET;40P,2R,0.8mm,SMD-A,SN	
CP01	2404-000157	C-TA,CHIP;1uF,20%,35V,-,TP,3216,-	
CP02	2404-000335	C-TA,CHIP;3.3uF,20%,16V,GP,TP,3216	
CP03	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP04	2404-000212	C-TA,CHIP;3.3uF,20%,25V,-,TP,3528,-	
CP05	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP06	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
CP07	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	

Loc.No	Part No	Description ; Specification	Remark
CP08	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
CP09	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP10	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
CP11	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
CP12	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CP13	2203-000812	C-CERAMIC,CHIP;0.033NF,5%,50V,C0G,TP,100	
CP14	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
CP15	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
CP16	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP17	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP18	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP19	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP21	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP22	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
CP23	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
CP24	2203-001405	C-CERAMIC,CHIP;22nF,+80-20%,25V,Y5V,TP,1	
CP25	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP26	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CP27	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CP28	2203-006047	C-CERAMIC,CHIP;33NF,10%,16V,X7R,TP,1005	
CP30	2203-006047	C-CERAMIC,CHIP;33NF,10%,16V,X7R,TP,1005	
CP33	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP34	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CP35	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP36	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
CP37	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
CP38	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CP39	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CP40	2203-000359	C-CERAMIC,CHIP;0.15NF,5%,50V,C0G,TP,1005	
CP41	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CP42	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CP43	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,	
D701	0401-001110	DIODE-SWITCHING;-,80V,300MA,SOD-523,TP	
D702	0401-001110	DIODE-SWITCHING;-,80V,300MA,SOD-523,TP	
D901	0401-001059	DIODE-SWITCHING;1SS362,80V,80mA,SC-75,TP	
D902	0401-001059	DIODE-SWITCHING;1SS362,80V,80mA,SC-75,TP	
DP02	0401-001054	DIODE-SWITCHING;KDS160,85V,300mA,SOD-323	
FL901	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
IC101	AD13-00019A	IC ASIC-LDV5000,PRML;LDV5000,DELTA-PJ,64	
IC102	1201-001511	IC-PREAMP;370250,VSOP,14P,-,DUAL,500V/V,	
IC201	AD13-00021A	IC ASIC;-,DV 1 CHIP(REV0.1),320,+1.8V,	
IC202	1105-001487	IC-DRAM;EM636165,2X512KX16BIT,FBGA,60P	
IC203	0801-002800	IC-CMOS LOGIC;NC7SV08,AND GATE,SC70,5P,4	
IC301	1201-001322	IC-VIDEO AMP;NJM2538V,SOP,20P,175MIL,-,-	
IC303	1204-001946	IC-OSD PROCESSOR;UPD6467GR,SSOP,20P,173M	
IC451	AC14-12012T	IC-OP AMP;TA75S01F(TE85L),QFP,-	
IC501	1205-001988	IC-DATA COMM./GEN.;TSB41AB1-PAP,QFP,64P,	
IC601	1003-001241	IC-MOTOR DRIVER;LB11990W,SQPF,64P,-,-,1A	
IC602	1201-001627	IC-OP AMP;12904,SSOP,TP,8P,173MIL,DUAL,1	
IC702	0909-001013	IC-REAL TIME CLOCK;5C372,8BIT,SOP,8P,-,3	
IC703	1203-002807	IC-VOLTAGE REGULATOR;XC6413FY01MR,SOT-25	
IC705	1103-001218	IC-EEPROM;524AB0X91,4Kx8Bit,SOP,8P,156MI	
IC706	1203-002184	IC-VOLTAGE REGULATOR;71725,SOT-23-5,5P,6	
IC708	0801-002800	IC-CMOS LOGIC;NC7SV08,AND GATE,SC70,5P,4	
IC841	1205-002247	IC-CODEC;AK4564VQ,LQFP,48P,7X7MM,PLASTI	
IC843	AD09-00122A	IC-MOC-VOICE;ML2201,-,8PIN,2V~5.5V,4.096	
IC901	1203-002323	IC-PWM CONTROLLER;MB3881,LQFP,64P,-,PLAS	
ICA01	AD13-00018A	IC HYBRID-DSP5;S5C7375X,DELTA-PJ,232,0 T	
ICA02	1105-001423	IC-DRAM;K4S643232E-SE/N70,4X512KX32BIT	
ICA03	1107-001365	IC-FLASH MEMORY;K8D1616UBA,1MX16BIT,TBGA	
ICP01	1003-001065	IC-CLOCK DRIVER;KS7221D,SOP,20P,225MIL,Q	
ICP02	1002-001270	IC-A/D CONVERTER;TLV990BPFB,10,TQFP,48P,	
ICP03	1003-001530	IC-MOTOR DRIVER;UPD16877MA-6A5,TSSOP,24P	
ICP05	1201-001667	IC-OP AMP;12902,SSOP,TP,14P,173MIL,QUAD,	
ICP06	0801-002417	IC-CMOS LOGIC;7SHU04,INVERTER,SSOP,5P,49	
ICP07	0801-002417	IC-CMOS LOGIC;7SHU04,INVERTER,SSOP,5P,49	
ICP08	AC14-12012T	IC-OP AMP;TA75S01F(TE85L),QFP,-	
L112	2703-002430	INDUCTOR-SMD;4.7UH,25%,2.0X1.25X0.85MM	
L113	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L203	2703-002428	INDUCTOR-SMD;1UH,25%,2.0X1.25X0.85MM	
L204	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L205	2703-002430	INDUCTOR-SMD;4.7UH,25%,2.0X1.25X0.85MM	
L206	2703-002428	INDUCTOR-SMD;1UH,25%,2.0X1.25X0.85MM	
L208	2007-000643	R-CHIP;270ohm,5%,1/10W,TP,1608	
L303	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L304	2703-002430	INDUCTOR-SMD;4.7UH,25%,2.0X1.25X0.85MM	
L305	2703-002430	INDUCTOR-SMD;4.7UH,25%,2.0X1.25X0.85MM	
L501	2703-002430	INDUCTOR-SMD;4.7UH,25%,2.0X1.25X0.85MM	
L502	2703-002430	INDUCTOR-SMD;4.7UH,25%,2.0X1.25X0.85MM	
L601	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L701	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L702	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L841	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L842	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L843	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L846	2703-002428	INDUCTOR-SMD;1UH,25%,2.0X1.25X0.85MM	
L847	2703-002428	INDUCTOR-SMD;1UH,25%,2.0X1.25X0.85MM	
L901	2007-000033	R-CHIP;0ohm,5%,1/4W,TP,3216	
L902	2007-000033	R-CHIP;0ohm,5%,1/4W,TP,3216	
L903	2703-002414	INDUCTOR-SMD;22UH,10%,3.2X2.5X1.3MM	
L904	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L905	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L906	2703-001865	INDUCTOR-SMD;33UH,20%,6X6X2.8MM	
L907	2703-001910	INDUCTOR-SMD;68uH,20%,6x6x2.8mm	
L908	2703-001910	INDUCTOR-SMD;68uH,20%,6x6x2.8mm	
L910	2703-002569	INDUCTOR-SMD;22UH,20%,4.0X4.0X1.9MM	
L913	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L914	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L915	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L917	2703-001865	INDUCTOR-SMD;33UH,20%,6X6X2.8MM	
L918	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
L919	2703-001867	INDUCTOR-SMD;1UH,20%,2.5X2X1.8MM	
L922	2703-002569	INDUCTOR-SMD;22UH,20%,4.0X4.0X1.9MM	
L924	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L925	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L926	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L929	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L930	2703-002569	INDUCTOR-SMD;22UH,20%,4.0X4.0X1.9MM	
LA01	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
LA02	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
LA03	2703-002181	INDUCTOR-SMD;33UH,10%,2.5X2.0X1.8MM	
LA04	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
LA05	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
LP01	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
LP02	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
LP03	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
LP04	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
LP05	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
LP06	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
PS901	3601-001331	FUSE-SURFACE MOUNT;32V,1.25A,SLOW BLOW,,	
PS902	3601-001331	FUSE-SURFACE MOUNT;32V,1.25A,SLOW BLOW,,	
PS903	3601-001331	FUSE-SURFACE MOUNT;32V,1.25A,SLOW BLOW,,	
Q111	0501-002128	TR-SMALL SIGNAL;KTC4075,NPN,100mW,USM,TP	
Q112	0501-002128	TR-SMALL SIGNAL;KTC4075,NPN,100mW,USM,TP	
Q201	0504-000167	TR-DIGITAL;RN1102,NPN,100MW,10K/10K,SSM,	
Q301	0504-001032	TR-DIGITAL;KRC404,NPN,100MW,47K/47K,SOT-	
Q302	0504-001032	TR-DIGITAL;KRC404,NPN,100MW,47K/47K,SOT-	
Q303	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,	
Q451	0505-001726	FET-SILICON;ECH8603,P,-20V,-4A,37MOHM,1.	
Q452	0504-001102	TR-DIGITAL;EMD3,NPN/PNP,150MW,10K/10K,EM	
Q453	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,	
Q454	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,	
Q601	0504-000167	TR-DIGITAL;RN1102,NPN,100MW,10K/10K,SSM,	
Q602	0501-000172	TR-SMALL SIGNAL;2SB1121,PNP,500mW,PCP,TP	
Q603	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,	
Q604	0501-002373	TR-SMALL SIGNAL;EMX2,NPN,150MW,EMT6,TP,1	

Loc.No	Part No	Description ; Specification	Remark
Q701	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,	
Q702	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,	
Q703	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,	
Q704	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,	
Q841	0504-001101	TR-DIGITAL;EMD2,NPN/PNP,150MW,22K/22K,EM	
Q842	0501-002373	TR-SMALL SIGNAL;EMX2,NPN,150MW,EMT6,TP,1	
Q843	0501-002373	TR-SMALL SIGNAL;EMX2,NPN,150MW,EMT6,TP,1	
Q901	0505-001646	FET-SILICON;MCH5803,N,30V,1.4A,370MOHM,0	
Q902	0504-001102	TR-DIGITAL;EMD3,NPN/PNP,150MW,10K/10K,EM	
Q903	0504-001101	TR-DIGITAL;EMD2,NPN/PNP,150MW,22K/22K,EM	
Q904	0504-001101	TR-DIGITAL;EMD2,NPN/PNP,150MW,22K/22K,EM	
Q905	0504-001102	TR-DIGITAL;EMD3,NPN/PNP,150MW,10K/10K,EM	
Q906	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM	
Q907	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM	
Q908	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM	
Q909	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM	
Q910	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM	
Q912	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM	
Q913	0506-001066	TR-ARRAY;UMF5,NPN/PNP,2,150MW,SC-88,TP,	
Q914	0506-001066	TR-ARRAY;UMF5,NPN/PNP,2,150MW,SC-88,TP,	
Q915	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM	
Q917	0506-001066	TR-ARRAY;UMF5,NPN/PNP,2,150MW,SC-88,TP,	
Q918	0506-001066	TR-ARRAY;UMF5,NPN/PNP,2,150MW,SC-88,TP,	
Q920	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,	
QP01	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP	
QP02	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,	
QP03	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP	
QP05	0504-001025	TR-DIGITAL;DTC143EE,NPN,150MW,4.7K,EMT3,	
QP06	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP	
QP07	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,	
R111	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005	
R112	2007-007318	R-CHIP;1Kohm,1%,1/16W,DA,TP,1005	
R113	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R115	2007-007132	R-CHIP;15Kohm,1%,1/16W,DA,TP,1005	
R116	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005	
R117	2007-007318	R-CHIP;1Kohm,1%,1/16W,DA,TP,1005	
R118	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R119	2007-007095	R-CHIP;390OHM,5%,1/16W,DA,TP,1005	
R120	2007-007095	R-CHIP;390OHM,5%,1/16W,DA,TP,1005	
R122	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R123	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R124	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R125	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R126	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R127	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R128	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R129	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R130	2007-000242	R-CHIP;1.5Kohm,5%,1/16W,DA,TP,1005	
R132	2007-000155	R-CHIP;27Kohm,5%,1/16W,DA,TP,1005	
R133	2007-000159	R-CHIP;56Kohm,5%,1/16W,DA,TP,1005	
R134	2007-000139	R-CHIP;220ohm,5%,1/16W,DA,TP,1005	
R135	2007-007095	R-CHIP;390OHM,5%,1/16W,DA,TP,1005	
R136	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R137	2007-007318	R-CHIP;1Kohm,1%,1/16W,DA,TP,1005	
R140	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R202	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R205	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R206	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R207	2007-007306	R-CHIP;100ohm,1%,1/16W,DA,TP,1005	
R208	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R209	2007-002970	R-CHIP;56OHM,5%,1/16W,DA,TP,1005	
R210	2007-000932	R-CHIP;470ohm,5%,1/16W,DA,TP,1005	
R211	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R212	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
R213	2007-000142	R-CHIP;2.7Kohm,5%,1/16W,DA,TP,1005	
R214	2007-001333	R-CHIP;18Kohm,5%,1/16W,DA,TP,1005	
R215	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R216	2007-007318	R-CHIP;1Kohm,1%,1/16W,DA,TP,1005	

Loc.No	Part No	Description ; Specification	Remark
R217	2007-000142	R-CHIP;2.7Kohm,5%,1/16W,DA,TP,1005	
R218	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
R219	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R220	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
R221	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R222	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R223	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R225	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R227	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
R229	2007-000142	R-CHIP;2.7Kohm,5%,1/16W,DA,TP,1005	
R230	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R231	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R235	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
R238	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R244	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R245	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R262	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R278	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R292	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R301	2007-008015	R-CHIP;75ohm,1%,1/16W,DA,TP,1005	
R302	2007-008015	R-CHIP;75ohm,1%,1/16W,DA,TP,1005	
R303	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R304	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R305	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R306	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R308	2007-002970	R-CHIP;56OHM,5%,1/16W,DA,TP,1005	
R309	2007-001305	R-CHIP;120ohm,5%,1/16W,DA,TP,1005	
R310	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R311	2007-003029	R-CHIP;820KOHM,5%,1/16W,DA,TP,1005	
R312	2007-001305	R-CHIP;120ohm,5%,1/16W,DA,TP,1005	
R313	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R314	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R315	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R316	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R320	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005	
R323	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R329	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R398	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R451	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
R452	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R454	2007-007318	R-CHIP;1Kohm,1%,1/16W,DA,TP,1005	
R455	2007-007132	R-CHIP;15Kohm,1%,1/16W,DA,TP,1005	
R456	2007-007946	R-CHIP;470KOHM,1%,1/16W,DA,TP,1005	
R457	2007-008354	R-CHIP;220KOHM,1%,1/16W,DA,TP,1005	
R524	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R526	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R527	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R529	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R531	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R532	2007-008301	R-CHIP;56.2OHM,1%,1/16W,DA,TP,1005	
R533	2007-008301	R-CHIP;56.2OHM,1%,1/16W,DA,TP,1005	
R534	2007-008300	R-CHIP;5.11KOHM,1%,1/16W,DA,TP,1005	
R535	2007-008301	R-CHIP;56.2OHM,1%,1/16W,DA,TP,1005	
R536	2007-008301	R-CHIP;56.2OHM,1%,1/16W,DA,TP,1005	
R537	2007-008391	R-CHIP;6.34KOHM,1%,1/16W,DA,TP,1005	
R599	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R601	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R602	2007-001311	R-CHIP;270ohm,5%,1/16W,DA,TP,1005	
R603	2007-002970	R-CHIP;56OHM,5%,1/16W,DA,TP,1005	
R604	2007-001311	R-CHIP;270ohm,5%,1/16W,DA,TP,1005	
R605	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R606	2007-007573	R-CHIP;330Kohm,1%,1/16W,DA,TP,1005	
R607	2007-007573	R-CHIP;330Kohm,1%,1/16W,DA,TP,1005	
R609	2007-007134	R-CHIP;39Kohm,1%,1/16W,DA,TP,1005	
R610	2007-007107	R-CHIP;100Kohm,1%,1/16W,DA,TP,1005	
R611	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005	
R612	2007-007313	R-CHIP;6.8Kohm,1%,1/16W,DA,TP,1005	
R613	2007-000160	R-CHIP;68Kohm,5%,1/16W,DA,TP,1005	

Loc.No	Part No	Description ; Specification	Remark
R614	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005	
R615	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005	
R616	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R617	2007-000160	R-CHIP;68Kohm,5%,1/16W,DA,TP,1005	
R618	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005	
R619	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005	
R620	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R622	2007-000142	R-CHIP;2.7Kohm,5%,1/16W,DA,TP,1005	
R623	2007-007312	R-CHIP;20Kohm,1%,1/16W,DA,TP,1005	
R624	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005	
R625	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005	
R626	2007-000483	R-CHIP;1ohm,5%,1/8W,TP,2012	
R627	2007-000483	R-CHIP;1ohm,5%,1/8W,TP,2012	
R628	2007-000483	R-CHIP;1ohm,5%,1/8W,TP,2012	
R629	2007-000483	R-CHIP;1ohm,5%,1/8W,TP,2012	
R630	2007-000483	R-CHIP;1ohm,5%,1/8W,TP,2012	
R636	2007-000775	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005	
R637	2007-000775	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005	
R643	2007-000156	R-CHIP;30Kohm,5%,1/16W,DA,TP,1005	
R644	2007-000156	R-CHIP;30Kohm,5%,1/16W,DA,TP,1005	
R649	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R650	2007-001341	R-CHIP;680Kohm,5%,1/16W,DA,TP,1005	
R652	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
R653	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R656	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R657	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R701	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R702	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R703	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R704	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R705	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R707	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R708	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R709	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R710	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7101	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005	
R7102	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7103	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7104	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7105	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005	
R7108	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7109	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R711	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7111	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7113	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R7114	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005	
R7115	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R7118	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7119	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R712	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7120	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7121	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7122	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7125	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7126	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R7127	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
R7128	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R713	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R7130	2007-000174	R-CHIP;47ohm,5%,1/16W,DA,TP,1005	
R7131	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7133	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7134	2007-000174	R-CHIP;47ohm,5%,1/16W,DA,TP,1005	
R7136	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7137	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7138	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7139	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R714	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R7140	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7141	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R7142	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R7143	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R7144	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7145	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7146	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R7147	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7148	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R715	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R716	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R717	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R718	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R720	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R721	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R722	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R723	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R724	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R725	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R726	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R727	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R728	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R729	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R730	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R731	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R732	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R733	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R734	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R735	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R736	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R737	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R738	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R739	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R740	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R741	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R742	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R743	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R744	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R745	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R746	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R747	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R748	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R749	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R750	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R751	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R752	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R753	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R754	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R755	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R756	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R757	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R758	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R759	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R760	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R761	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R762	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R763	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R764	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R765	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R766	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R767	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R768	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R769	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R770	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R771	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R772	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R773	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R774	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R775	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	

Loc.No	Part No	Description ; Specification	Remark
R776	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R777	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R778	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R779	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R780	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R781	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R782	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R784	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R785	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R786	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R787	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R788	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R789	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R790	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R791	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R792	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R793	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R794	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R795	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R796	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R797	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R798	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R799	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R842	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R843	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R844	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R846	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R847	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R848	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R850	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R851	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005	
R852	2007-000932	R-CHIP;470ohm,5%,1/16W,DA,TP,1005	
R853	2007-000932	R-CHIP;470ohm,5%,1/16W,DA,TP,1005	
R854	2007-000146	R-CHIP;6.8Kohm,5%,1/16W,DA,TP,1005	
R855	2007-002797	R-CHIP;560ohm,5%,1/16W,DA,TP,1005	
R856	2007-000146	R-CHIP;6.8Kohm,5%,1/16W,DA,TP,1005	
R857	2007-002797	R-CHIP;560ohm,5%,1/16W,DA,TP,1005	
R858	2007-000146	R-CHIP;6.8Kohm,5%,1/16W,DA,TP,1005	
R859	2007-000146	R-CHIP;6.8Kohm,5%,1/16W,DA,TP,1005	
R860	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R862	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R863	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R864	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R865	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R866	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R868	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R869	2007-000932	R-CHIP;470ohm,5%,1/16W,DA,TP,1005	
R870	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R871	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R874	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R875	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R876	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R880	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R881	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R882	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R883	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R884	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R901	2007-008275	R-CHIP;30KOHM,1%,1/16W,DA,TP,1005	
R902	2007-007311	R-CHIP;22Kohm,1%,1/16W,DA,TP,1005	
R903	2007-007588	R-CHIP;1.8Kohm,1%,1/16W,DA,TP,1005	
R904	2007-000831	R-CHIP;39Kohm,5%,1/16W,DA,TP,1005	
R905	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005	
R906	2007-007309	R-CHIP;12Kohm,1%,1/16W,DA,TP,1005	
R907	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R908	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005	
R909	2007-008275	R-CHIP;30KOHM,1%,1/16W,DA,TP,1005	
R910	2007-007131	R-CHIP;13Kohm,1%,1/16W,DA,TP,1005	
R911	2007-008275	R-CHIP;30KOHM,1%,1/16W,DA,TP,1005	

Loc.No	Part No	Description ; Specification	Remark
R912	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R913	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R914	2007-007309	R-CHIP;12Kohm,1%,1/16W,DA,TP,1005	
R915	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005	
R916	2007-007132	R-CHIP;15Kohm,1%,1/16W,DA,TP,1005	
R917	2007-001333	R-CHIP;18Kohm,5%,1/16W,DA,TP,1005	
R918	2007-001333	R-CHIP;18Kohm,5%,1/16W,DA,TP,1005	
R919	2007-007312	R-CHIP;20Kohm,1%,1/16W,DA,TP,1005	
R920	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R921	2007-007310	R-CHIP;8.2Kohm,1%,1/16W,DA,TP,1005	
R922	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R923	2007-007470	R-CHIP;7.5Kohm,1%,1/16W,DA,TP,1005	
R924	2007-007311	R-CHIP;22Kohm,1%,1/16W,DA,TP,1005	
R925	2007-007311	R-CHIP;22Kohm,1%,1/16W,DA,TP,1005	
R926	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R927	2007-007312	R-CHIP;20Kohm,1%,1/16W,DA,TP,1005	
R928	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R929	2007-007312	R-CHIP;20Kohm,1%,1/16W,DA,TP,1005	
R930	2007-007470	R-CHIP;7.5Kohm,1%,1/16W,DA,TP,1005	
R932	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R933	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R934	2007-007312	R-CHIP;20Kohm,1%,1/16W,DA,TP,1005	
R935	2007-007310	R-CHIP;8.2Kohm,1%,1/16W,DA,TP,1005	
R936	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005	
R937	2007-007311	R-CHIP;22Kohm,1%,1/16W,DA,TP,1005	
R940	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
R946	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R947	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R948	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R949	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R951	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R952	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R953	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R954	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R961	2007-007138	R-CHIP;27KOHM,1%,1/16W,DA,TP,1005	
R964	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R974	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA01	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
RA02	2007-001311	R-CHIP;270ohm,5%,1/16W,DA,TP,1005	
RA03	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
RA06	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
RA07	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
RA11	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
RA12	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
RA16	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
RA17	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
RA18	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RA20	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA26	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RA30	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RA31	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA40	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005	
RA41	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005	
RA43	2007-001311	R-CHIP;270ohm,5%,1/16W,DA,TP,1005	
RA50	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
RA51	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005	
RA52	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005	
RA53	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RA56	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA58	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
RA64	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RA65	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RA66	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RA67	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RA68	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RA71	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA72	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA75	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	

Loc.No	Part No	Description ; Specification	Remark
RA76	2007-002970	R-CHIP;56OHM,5%,1/16W,DA,TP,1005	
RA77	2007-001311	R-CHIP;270ohm,5%,1/16W,DA,TP,1005	
RA78	2007-001311	R-CHIP;270ohm,5%,1/16W,DA,TP,1005	
RA79	2007-002970	R-CHIP;56OHM,5%,1/16W,DA,TP,1005	
RA80	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA82	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RA83	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RA90	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005	
RA91	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RN841	2011-001393	R-NETWORK;1KOHM,5%,1/16W,L,CHIP,8P,TP	
RP01	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP02	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
RP05	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
RP06	2007-000636	R-CHIP;270Kohm,5%,1/16W,DA,TP,1005	
RP08	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
RP09	2007-000156	R-CHIP;30Kohm,5%,1/16W,DA,TP,1005	
RP10	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
RP11	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
RP12	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP13	2007-000139	R-CHIP;220ohm,5%,1/16W,DA,TP,1005	
RP15	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RP16	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RP17	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
RP18	2007-007001	R-CHIP;3.9KOHM,5%,1/16W,DA,TP,1005	
RP19	2007-007001	R-CHIP;3.9KOHM,5%,1/16W,DA,TP,1005	
RP20	2007-000775	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005	
RP21	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
RP23	2007-000982	R-CHIP;5.6Kohm,5%,1/16W,DA,TP,1005	
RP25	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RP28	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP29	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP30	2007-001307	R-CHIP;180ohm,5%,1/16W,DA,TP,1005	
RP31	2007-001307	R-CHIP;180ohm,5%,1/16W,DA,TP,1005	
RP32	2007-000159	R-CHIP;56Kohm,5%,1/16W,DA,TP,1005	
RP33	2007-000159	R-CHIP;56Kohm,5%,1/16W,DA,TP,1005	
RP34	2007-000775	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005	
RP36	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
RP37	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP38	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP40	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RP41	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP42	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP45	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
TPR1	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
TPR2	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
TPR3	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
TPR4	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
TPR5	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
X201	2801-003703	CRYSTAL-SMD;24.576MHz,50ppm,28-ACI,12pF,	
X202	2801-003424	CRYSTAL-SMD;41.85MHZ,50ppm,28-ACC,12pF,-	
X701	2801-004258	CRYSTAL-SMD;12.500MHz,50ppm,28-ACI,10.0p	
X702	2801-003856	CRYSTAL-SMD;0.032768MHZ,20PPM,28-ACP,7PF	
XA01	2804-001309	OSCILLATOR-CLOCK;54MHZ,20PPM,10TTL & CMO	
-	**-**	**ASSY-CCD BOARD,C;,THETA-PJ,THETA,CCD BOA**	**S.N.A**
CC01	2404-000212	C-TA,CHIP;3.3uF,20%,25V,-,TP,3528,-	
CC02	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CC03	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CC04	2203-000491	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,1608	
CC05	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CC06	2404-000335	C-TA,CHIP;3.3uF,20%,16V,GP,TP,3216	
CNC01	3710-001106	CONNECTOR-SOCKET;40P,2R,0.8mm,SMD-S,SN	
CNC02	3708-001687	CONNECTOR-FPC/FFC/PIC;27P,0.3MM,SMD-A,SN	
DC01	0401-001054	DIODE-SWITCHING;KDS160,85V,300mA,SOD-323	
QC01	0505-000180	FET-SILICON;2SK1070,N,-,50mA,-,150mW,SOT	
RC01	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	
RC02	2007-000079	R-CHIP;1.8Kohm,5%,1/10W,TP,1608	
RC03	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	

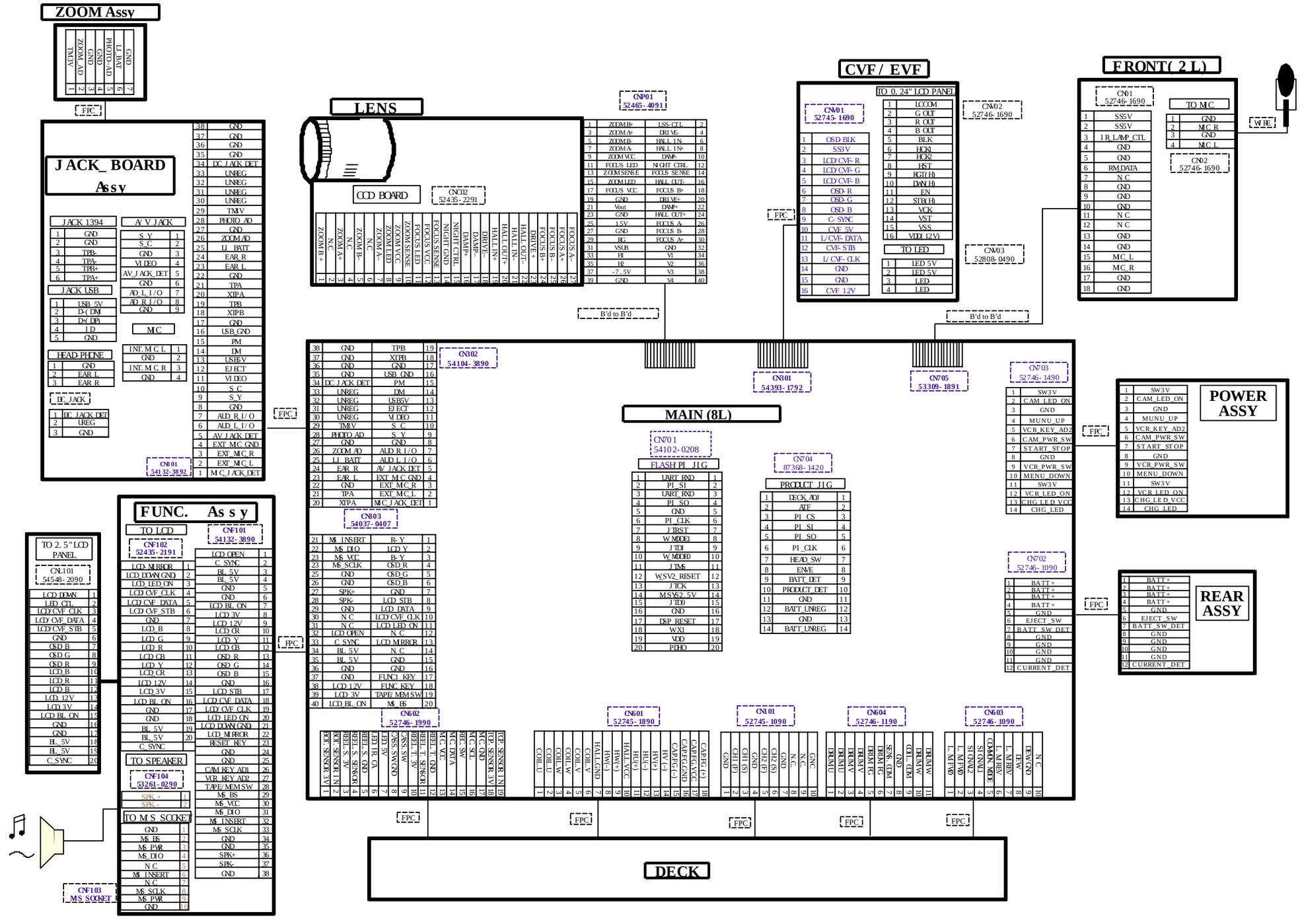
Loc.No	Part No	Description ; Specification	Remark
SWC01	3404-001116	SWITCH-TACT;12V DC,50mA,160gf,3.5x7.8x3.	
-	**-**	**ASSY-FRONT BOARD;THETA-PJ,-,-**	**S.N.A**
CF01	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CN01	3710-001443	CONNECTOR-SOCKET;18P,2R,0.8mm,SMD-S,SN	
CN02	3711-000922	CONNECTOR-HEADER;BOX,4P,1R,1.25mm,SMD-A,	
LED01	0601-001774	LED-IR;SMD,5.8x6.03mm,200mW,5V,875nm,	
LED02	0601-001774	LED-IR;SMD,5.8x6.03mm,200mW,5V,875nm,	
QF01	0501-000546	TR-SMALL SIGNAL;KSA1298,PNP,200mW,SOT-23	
QF02	0504-001038	TR-DIGITAL;KRC402,NPN,100MW,10K/10K,SOT-	
REM01	AD32-00007A	MODULE REMOCON;-,KSM-603TM,37.9KHz,940nm	
RF01	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
RF02	2007-000839	R-CHIP;39ohm,5%,1/10W,TP,1608	
RF03	2007-000839	R-CHIP;39ohm,5%,1/10W,TP,1608	
RF04	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
RF05	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	
RF06	2007-000097	R-CHIP;47Kohm,5%,1/10W,TP,1608	
935	**AD97-06506B**	**ASSY-EVF BOARD(PAL);DVC,VP-D26,EVF BOARD**	
CE01	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CE02	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CE03	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CE04	2203-000440	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1608,-	
CE05	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528,-	
CE07	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CE08	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CE10	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CE11	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CE12	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CE13	2203-000975	C-CERAMIC,CHIP;47nF,10%,25V,X7R,TP,1608,	
CE14	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-	
CE15	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-	
CE16	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CE17	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CE18	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CE19	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CE20	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CNE01	3708-001680	CONNECTOR-FPC/FFC/PIC;6P,0.5MM,SMD-A,SN	
CNE02	3708-001076	CONNECTOR-FPC/FFC/PIC;20P,0.5MM,SMD-S,SN	
DE02	0401-001054	DIODE-SWITCHING;KDS160,85V,300mA,SOD-323	
DE03	0404-000110	DIODE-SCHOTTKY;RB411D,20V,500mA,SOT-23,T	
DE04	0403-001421	DIODE-ZENER;KDZ2.7V,2.5-2.9V,150MW,SOD-3	
ICE01	1003-001373	IC-LCD DRIVER;MCVVQ111FB,LQFP,48P,276MIL	
LE01	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
LE03	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
LED01	0601-001586	LED;CHIP,WHT,-,470NM	
QE02	0501-002310	TR-SMALL SIGNAL;HN1B04FU,PNP/NPN,200mW,U	
RE01	2007-001125	R-CHIP;68Kohm,1%,1/10W,TP,1608	
RE02	2007-001068	R-CHIP;6.8Kohm,1%,1/10W,TP,1608	
RE05	2007-000772	R-CHIP;33Kohm,1%,1/10W,TP,1608	
RE06	2007-000828	R-CHIP;39Kohm,1%,1/10W,TP,1608	
RE07	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
RE16	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
RE17	2007-000082	R-CHIP;3.3Kohm,5%,1/10W,TP,1608	
RE19	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
RE21	2007-000091	R-CHIP;12Kohm,5%,1/10W,TP,1608	
RE22	2007-000075	R-CHIP;220ohm,5%,1/10W,TP,1608	
RE24	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
RE25	2007-000097	R-CHIP;47Kohm,5%,1/10W,TP,1608	
RE26	2007-000125	R-CHIP;3.9Kohm,5%,1/10W,TP,1608	
RE29	2007-000091	R-CHIP;12Kohm,5%,1/10W,TP,1608	
RE30	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
RE31	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
VRE02	2104-001007	VR-SMD;10Kohm,25%,0.15W,TOP	

Loc.No	Part No	Description ; Specification	Remark
305	**AD97-06619A**	**ASSY-LCD BOARD;-,THETA-PJ,THETA,LCD**	
CL103	2301-001108	C-FILM,CHIP;22nF,5%,50V,TP,3.2x2.5x1.4,3	
CL104	2203-005040	C-CERAMIC,CHIP;0.012nF,5%,3kV,NP0,TP,452	
CL105	2404-001131	C-TA,CHIP;22UF,10%,10V,GP,TP,3528	
CL106	2404-001131	C-TA,CHIP;22UF,10%,10V,GP,TP,3528	
CL107	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL108	2404-001131	C-TA,CHIP;22UF,10%,10V,GP,TP,3528	
CL110	2203-005774	C-CERAMIC,CHIP;1000nF,+80-20%,50V,Y5V,TP	
CL111	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL112	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL115	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528,-	
CL116	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL118	2203-005887	C-CERAMIC,CHIP;680NF,+80-20%,10V,Y5V,TP,	
CL119	2203-005887	C-CERAMIC,CHIP;680NF,+80-20%,10V,Y5V,TP,	
CL120	2203-005887	C-CERAMIC,CHIP;680NF,+80-20%,10V,Y5V,TP,	
CL121	2404-001131	C-TA,CHIP;22UF,10%,10V,GP,TP,3528	
CL123	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
CL124	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CL125	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL126	2203-005887	C-CERAMIC,CHIP;680NF,+80-20%,10V,Y5V,TP,	
CL127	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
CL128	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL129	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL130	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL132	2203-005774	C-CERAMIC,CHIP;1000nF,+80-20%,50V,Y5V,TP	
CL133	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL134	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CL135	2203-001103	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,1608	
CL136	2404-000335	C-TA,CHIP;3.3uF,20%,16V,GP,TP,3216	
CL137	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL140	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL141	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CNL101	3708-001651	CONNECTOR-FPC/FFC/PIC;20P,0.5MM,SMD-A,-	
CNL301	3708-001652	CONNECTOR-FPC/FFC/PIC;24P,0.5MM,SMD-A,-	
DL102	0403-001422	DIODE-ZENER;KDZ4.3V,4.0-4.5V,150MW,SOD-3	
DL103	0403-001421	DIODE-ZENER;KDZ2.7V,2.5-2.9V,150MW,SOD-3	
ICL101	1003-001534	IC-LCD DRIVER;CXA3582R,LQFP,48P,7X7MM,-,	
ICL202	1103-001133	IC-EEPROM;24C020,256x8BIT,SOP,8P,150MIL,	
LED01	0601-001097	LED;CHIP,GRN,1.6x1.4mm,560nm	
LL101	2703-000409	INDUCTOR-SMD;47uH,10%,3.2x2.5x2.2mm	
LL102	2703-002271	INDUCTOR-SMD;100UH,-,5.5X5.5X2MM	
LL103	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
LL104	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
LL105	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
QL101	0504-001037	TR-DIGITAL;KRC401,NPN,100MW,4.7K/4.7K,SO	
QL102	0502-001221	TR-POWER;CPH3209,NPN,900MW,CPH3,TP,200-	
QL103	0502-001221	TR-POWER;CPH3209,NPN,900MW,CPH3,TP,200-	
QL104	0501-002311	TR-SMALL SIGNAL;HN2A01FU,PNP,200mW,UMD6,	
QL105	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP	
QL106	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,	
QL107	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,	
QL108	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP	
QL120	0504-001037	TR-DIGITAL;KRC401,NPN,100MW,4.7K/4.7K,SO	
RL104	2007-000516	R-CHIP;2.7Kohm,1%,1/10W,TP,1608	
RL105	2007-000516	R-CHIP;2.7Kohm,1%,1/10W,TP,1608	
RL106	2007-000092	R-CHIP;15Kohm,5%,1/10W,TP,1608	
RL107	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
RL108	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
RL109	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
RL111	2007-000094	R-CHIP;22Kohm,5%,1/10W,TP,1608	
RL112	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	
RL113	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	
RL114	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	
RL115	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	
RL116	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	
RL117	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
RL118	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
RL119	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
RL124	2007-000939	R-CHIP;47Kohm,1%,1/10W,TP,1608	
RL125	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
RL126	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	
RL131	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
RL132	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
RL133	2007-000094	R-CHIP;22Kohm,5%,1/10W,TP,1608	
RL135	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
RL136	2007-000124	R-CHIP;2.2Kohm,5%,1/10W,TP,1608	
RL137	2007-000116	R-CHIP;120ohm,5%,1/10W,TP,1608	
TL103	2601-001090	TRANS-SMD,PULSE;100MH,760,-,10.1X10.1X2.	
260	**AD97-06961A**	**ASSY-FUNCTION BOARD;THETA-PJ,-,DSC(X)**	
CF101	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CNF101	3708-001470	CONNECTOR-FPC/FFC/PIC;38P,0.5mm,SMD-A,SN	
CNF102	3708-001669	CONNECTOR-FPC/FFC/PIC;21P,0.5MM,SMD-A,SN	
CNF104	3711-000541	CONNECTOR-HEADER;BOX,2P,1R,1.25MM,SMD-A,	
RF101	2007-000077	R-CHIP;470ohm,5%,1/10W,TP,1608	
RF102	2007-000651	R-CHIP;27Kohm,1%,1/10W,TP,1608	
RF103	2007-000828	R-CHIP;39Kohm,1%,1/10W,TP,1608	
RF104	2007-001206	R-CHIP;82Kohm,1%,1/10W,TP,1608	
RF105	2007-000633	R-CHIP;270Kohm,1%,1/10W,TP,1608	
RF106	2007-000077	R-CHIP;470ohm,5%,1/10W,TP,1608	
RF107	2007-000651	R-CHIP;27Kohm,1%,1/10W,TP,1608	
SWF101	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWF102	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWF103	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWF104	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWF105	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWF106	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWF107	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWF109	3403-001084	SWITCH-PUSH;DC5V,1 MA,-,ON-OFF,-	
117	**AD97-06210B**	**ASSY-JACK BOARD;THETA-PJ,VP-D30,USB(X)**	
CN801	3708-001470	CONNECTOR-FPC/FFC/PIC;38P,0.5mm,SMD-A,SN	
CN802	3708-001842	CONNECTOR-FPC/FFC/PIC;7P,0.5mm,SMD-A,TIN	
J801	3722-001435	JACK-PHONE;4P,3.6PI,AG,RED,-	
J802	AD97-04962A	ASSY-A/V JACK;8P,ALPHA-PJ,A/V JACK 8P	
J804	AD37-00001A	JACK;-,IEEE1394 HEADER 4P,1,-,-	
J805	3722-001737	JACK-PHONE;4P,3.6PI,AG,GRN,-	
J806	AD97-04964A	ASSY-DC JACK;3P,ALPHA-PJ,DDAE-0174	
-	**-**	**ADAPTOR-AC POWER;100/240V,50HZ/60HZ,-,-,**	**S.N.A**
C10	2203-000455	C-CERAMIC,CHIP;1NF,5%,50V,C0G,TP,2012	
C11	2301-001092	C-FILM,MPEF;100nF,20%,275V,BK,18x6x12,15	
C12	2401-003302	C-AL;47uF,20%,400V,GP,TP,18X31.5,7.	
C13	2401-003046	C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5	
C14	2203-000716	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,2012	
C15	2203-000716	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,2012	
C16	2203-000716	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,2012	
C30	2201-000828	C-CERAMIC,DISC;3.3NF,20%,400V,Y5U,TP,15X	
C50	2401-000133	C-AL;1000uF,20%,16V,GP,TP,10x20,5	
C51	2401-000037	C-AL;470uF,20%,16V,GP,TP,8x11.5,5	
C55	2203-000239	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,2012	
C57	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C58	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C59	2203-000938	C-CERAMIC,CHIP;0.47NF,5%,50V,C0G,TP,2012	
C61	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C62	2401-000438	C-AL;10uF,20%,25V,GP,-,5x11,2mm	
C63	2203-000455	C-CERAMIC,CHIP;1NF,5%,50V,C0G,TP,2012	
CON1	3721-001034	PLUG-AC POWER;2P,-,-,NI	
CON2	3711-000900	CONNECTOR-HEADER;BOX,3P,1R,2.5mm,STRAIGH	
D10	0402-000137	DIODE-RECTIFIER;1N4007,1000V,1A,DO-41,TP	
D11	0402-000137	DIODE-RECTIFIER;1N4007,1000V,1A,DO-41,TP	
D12	0402-000137	DIODE-RECTIFIER;1N4007,1000V,1A,DO-41,TP	
D13	0402-000137	DIODE-RECTIFIER;1N4007,1000V,1A,DO-41,TP	
D14	0402-001041	DIODE-RECTIFIER;ERA22-10,1000V,500mA,MSR	
D15	0402-001041	DIODE-RECTIFIER;ERA22-10,1000V,500mA,MSR	
D50	0402-001062	DIODE-RECTIFIER;SF10SC9,90V,10A,FTO-220,	

Loc.No	Part No	Description ; Specification	Remark
D52	0407-000116	DIODE-ARRAY;DAP202K,80V,100mA,CK2-3,SOT-	
D53	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-	
D54	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-	
D55	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-	
F10	3601-000207	FUSE-CARTRIDGE;250V,1A,TIME-LAG,GLASS,5.	
IC10	1203-002180	IC-PWM CONTROLLER;5M0265,TO220F-4L,4P,39	
IC50	AC14-12006D	IC;KA431Z,TO-92,TAPING	
IC51	AC14-12001K	IC;KA324,-,-	
J10	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M	
J11	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M	
J50	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
J51	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M	
J52	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M	
J53	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
J55	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M	
J56	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M	
J57	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M	
J61	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M	
L50	AC27-12001N	COIL CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-	
LF10	AC27-32001F	COIL-LINE FILTER;BSF-2123,20MH,2OHM,ST,-	
PC10	0604-000119	PHOTO-COUPLER;TR,200-400%,200mW,DIL-4,ST	
Q52	0501-000457	TR-SMALL SIGNAL;MMBT2222A,NPN,350MW,SOT-	
R00	2007-000477	R-CHIP;1Mohm,5%,1/8W,TP,2012	
R10	2007-000481	R-CHIP;1Mohm,5%,1/4W,TP,3216	
R11	2007-000481	R-CHIP;1Mohm,5%,1/4W,TP,3216	
R13	2003-000771	R-METAL OXIDE(S);68Kohm,5%,2W,AA,TP,4x12	
R14	2007-000598	R-CHIP;22ohm,5%,1/4W,TP,3216	
R15	2007-000768	R-CHIP;330ohm,5%,1/4W,TP,3216	
R16	2007-000768	R-CHIP;330ohm,5%,1/4W,TP,3216	
R17	2007-001212	R-CHIP;82Kohm,5%,1/4W,TP,3216	
R18	2007-001212	R-CHIP;82Kohm,5%,1/4W,TP,3216	
R19	2007-001212	R-CHIP;82Kohm,5%,1/4W,TP,3216	
R20	2007-001212	R-CHIP;82Kohm,5%,1/4W,TP,3216	
R21	2001-000374	R-CARBON;15OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R30	2001-000739	R-CARBON;4.7MOHM,5%,1/8W,AA,TP,1.8X3.2M	
R30	2201-001005	C-CERAMIC,DISC;2.2NF,20%,400V,Y5U,TP,11X	
R30A	2201-001005	C-CERAMIC,DISC;2.2NF,20%,400V,Y5U,TP,11X	
R50	2007-000472	R-CHIP;1Kohm,5%,1/4W,TP,3216	
R51	2007-000472	R-CHIP;1Kohm,5%,1/4W,TP,3216	
R53	2007-000868	R-CHIP;4.7Kohm,1%,1/8W,TP,2012	
R54	2007-000868	R-CHIP;4.7Kohm,1%,1/8W,TP,2012	
R55	2007-000312	R-CHIP;10ohm,5%,1/4W,TP,3216	
R57	2007-000938	R-CHIP;47Kohm,1%,1/8W,TP,2012	
R58	2007-001205	R-CHIP;82Kohm,1%,1/8W,TP,2012	
R59	2007-000868	R-CHIP;4.7Kohm,1%,1/8W,TP,2012	
R60	2007-000771	R-CHIP;33Kohm,1%,1/8W,TP,2012	
R61	2007-000395	R-CHIP;150Kohm,5%,1/8W,TP,2012	
R62	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R63	2007-000290	R-CHIP;100ohm,5%,1/8W,TP,2012	
R64	2007-001205	R-CHIP;82Kohm,1%,1/8W,TP,2012	
R65	2007-000868	R-CHIP;4.7Kohm,1%,1/8W,TP,2012	
R66	2007-000406	R-CHIP;15Kohm,1%,1/8W,TP,2012	
R68	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R70	2007-000546	R-CHIP;20Kohm,5%,1/8W,TP,2012	
R71	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R72	2007-000582	R-CHIP;22Kohm,1%,1/8W,TP,2012	
R74	2007-001205	R-CHIP;82Kohm,1%,1/8W,TP,2012	
R76	2005-000102	R-WIRE WOUND;0.1ohm,1%,1W,AA,TP,4.5x11mm	
R77	2007-000068	R-CHIP;470Kohm,5%,1/8W,TP,2012	
R79	2007-001067	R-CHIP;6.8Kohm,1%,1/8W,TP,2012	
R80	2007-000477	R-CHIP;1Mohm,5%,1/8W,TP,2012	
T10	AD26-00026A	TRANS POWER;AA-E6,AA-E6,1.4mH,6P,100~260	
VR50	2101-001049	VR-ROTARY;500ohm,-,-,-	

MEMO

4. Wiring Diagram



MEMO

5. Schematic Diagrams

	Page
5-1 PRE AMP/PRML	5-2
5-2 DV 1 CHIP	5-3
5-3 VIDEO I/F	5-4
5-4 SERVO	5-5
5-5 SYSCON	5-6
5-6 AUDIO	5-7
5-7 DC/DC CONVERTER	5-8
5-8 Camera Process	5-9
5-9 Camera DSP	5-10
5-10 Camera Memory Block	5-11
5-11 EVF	5-12
5-12 Front	5-13
5-13 Function	5-14
5-14 LCD	5-15
5-15 Jack Board	5-16
5-16 CVF	5-17

Note

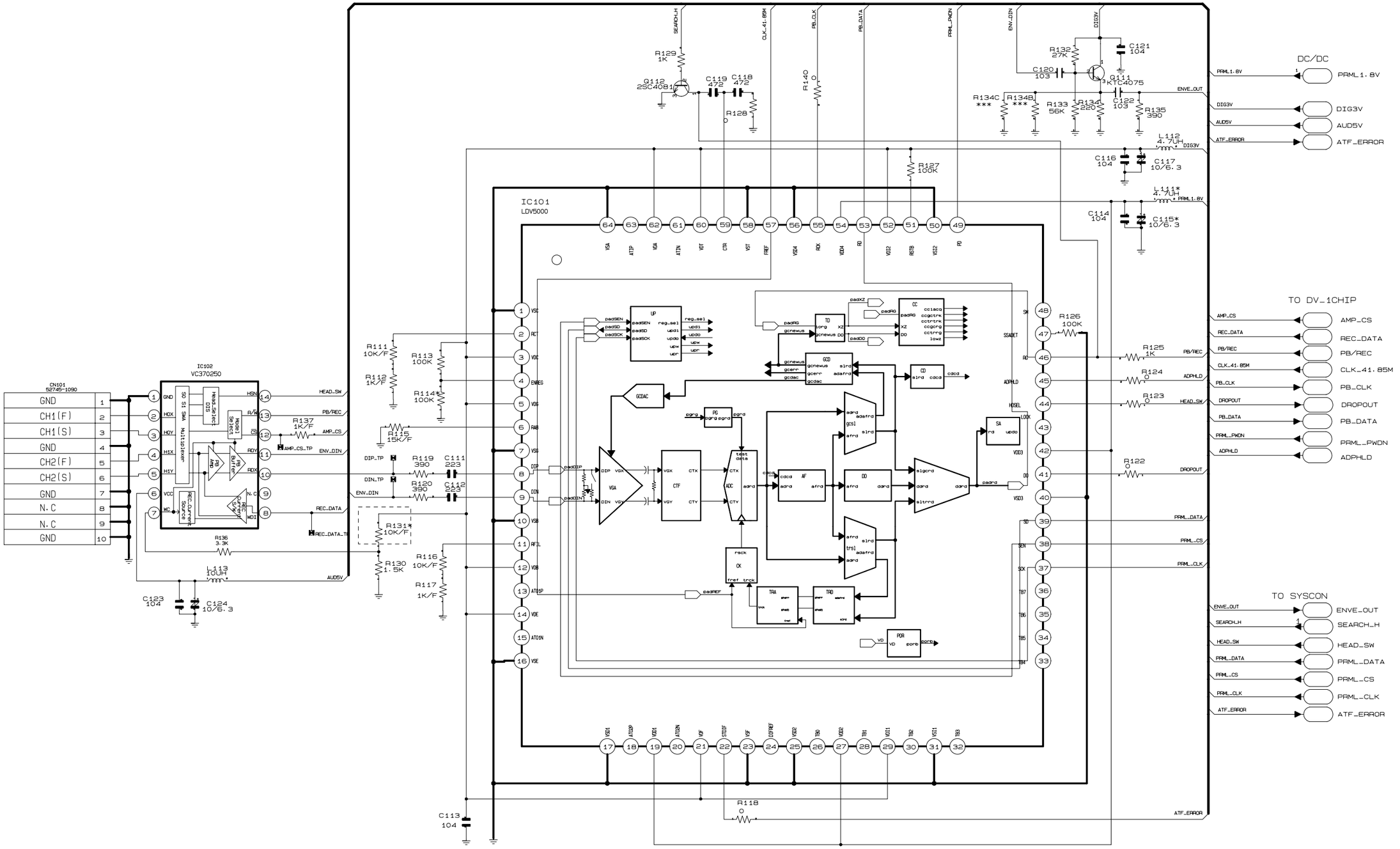
For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.

Special note :
Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

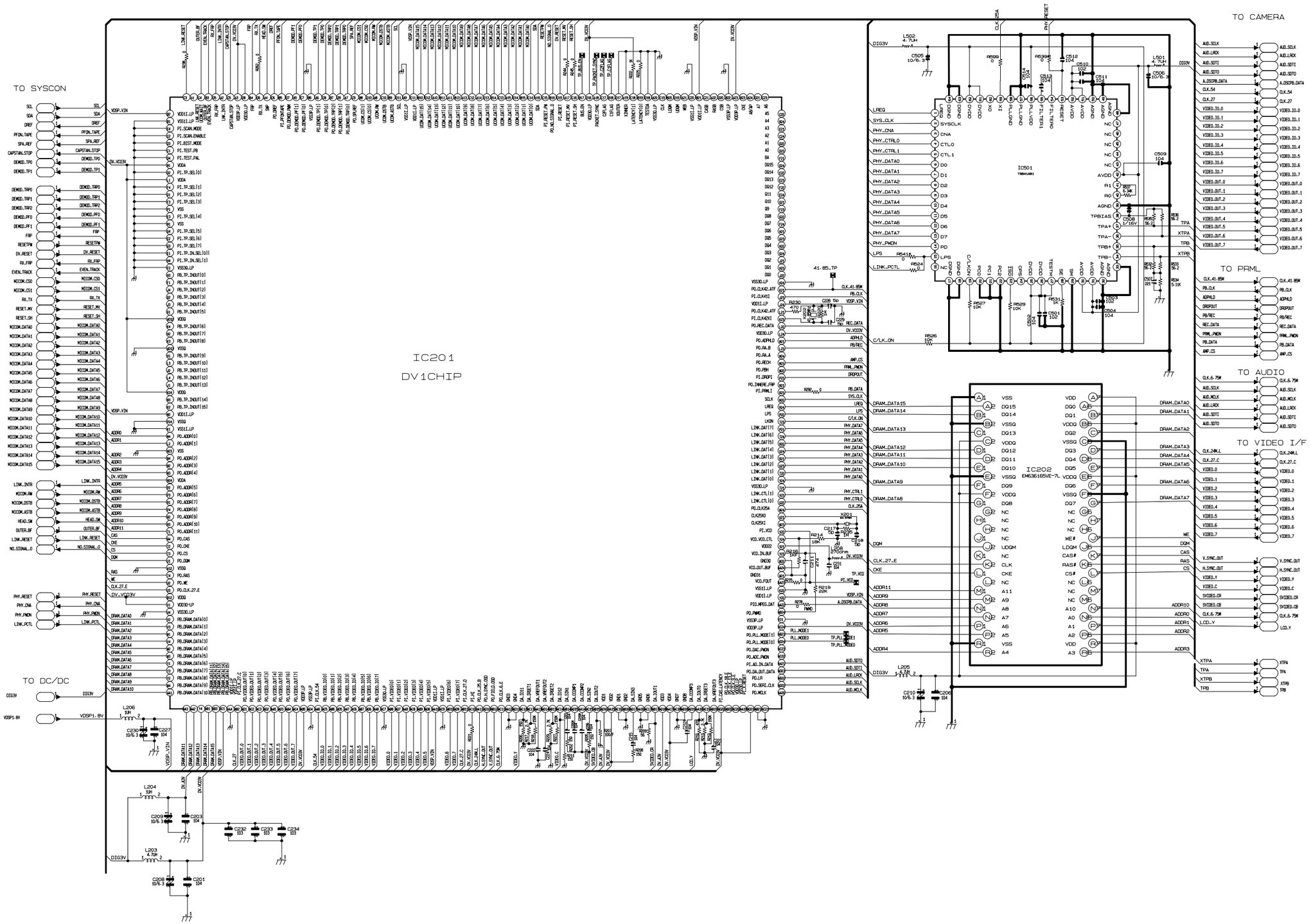
Note :
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

Important safety notices :
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components.
Use only the same type.

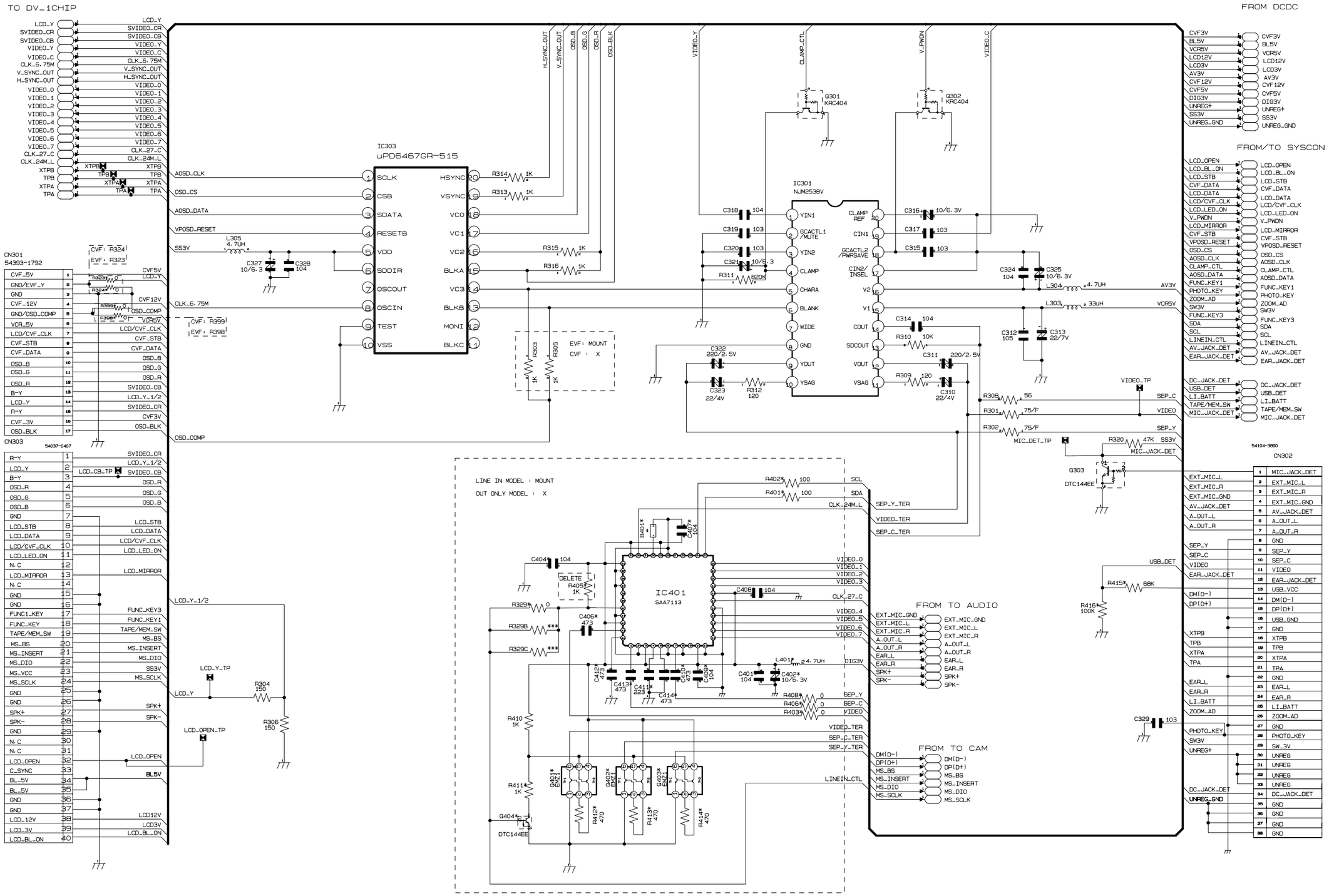
5-1 PRE AMP/PRML



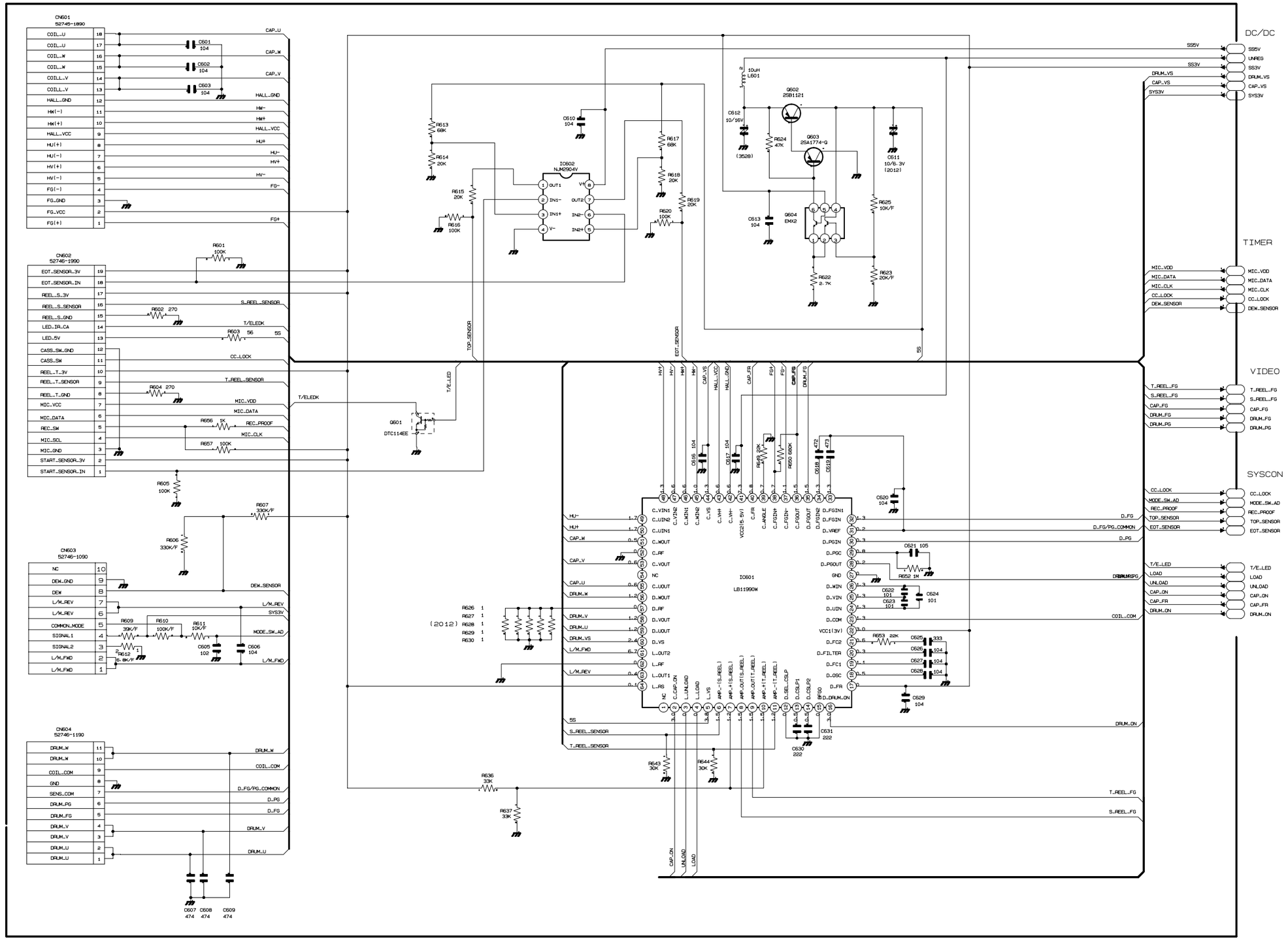
5-2 DV 1 CHIP


TO SYSCON
TO CAMERA
TO PRML
TO AUDIO
TO VIDEO I/F
TO DC/DC
IC201
DV1CHIP
IC202
EM636165VE-7L
IC501

5-3 VIDEO I/F


TO DV_1CHIP
FROM DCDC
FROM/TO SYSCON
IC303
uPD6467GR-515
IC301
NJM2538V
IC401
SAA7113
Q301
KRC404
Q302
KRC404
Q303
DTC144EE
Q404*
DTC144EE
CN301
54393-1792
CN303
54037-0407
CN302
54104-3690
LINE IN MODEL : MOUNT
OUT ONLY MODEL : X
EVF : MOUNT
CVF : X
CVF : R324
EVF : R323
CVF : R399
EVF : R398
DELETE
FROM TO AUDIO
FROM TO CAM
MIC_DET_TP
LCD_CB_TP
LCD_Y_TP
LCD_OPEN_TP
VIDEO_TP

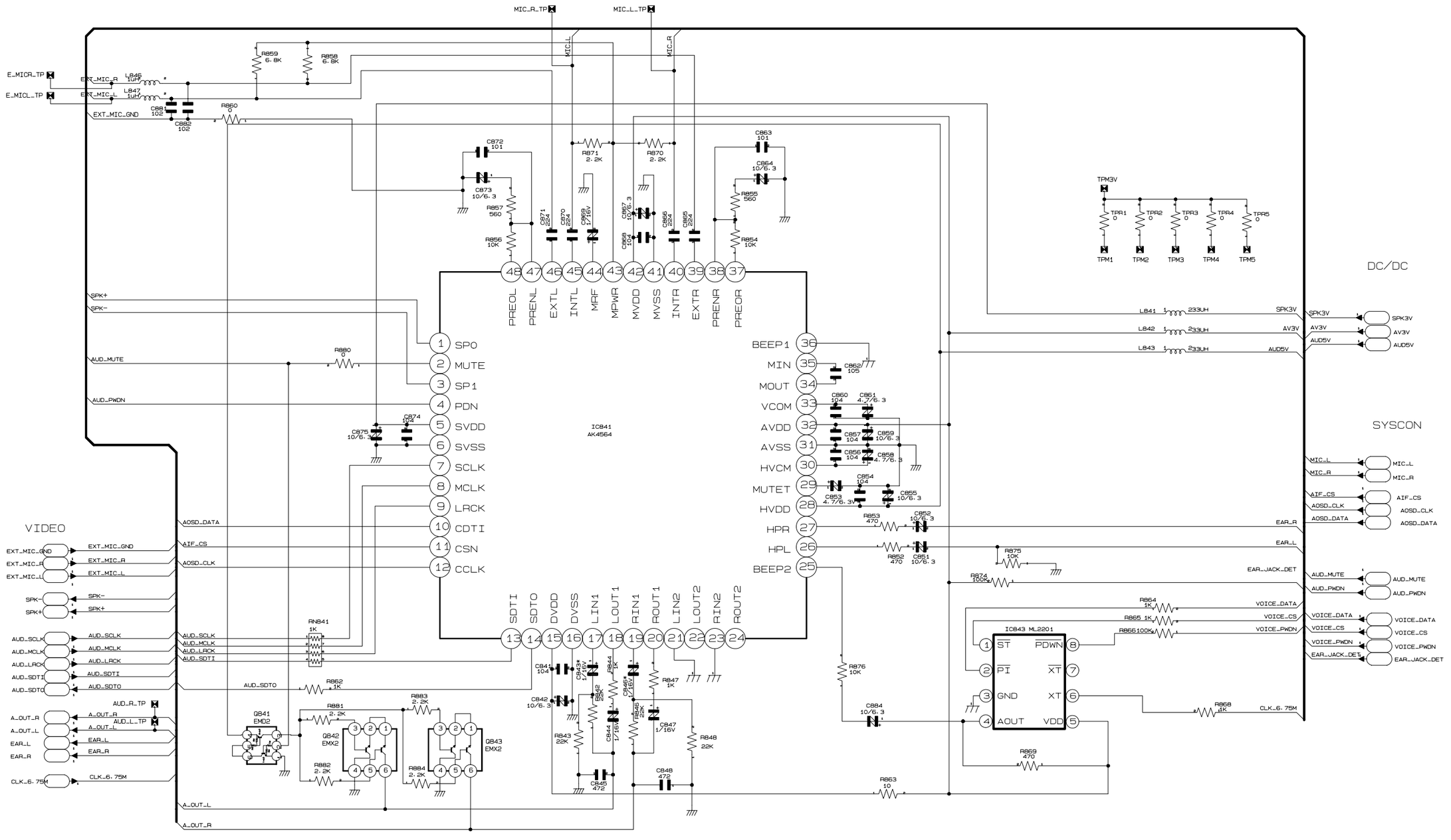
5-4 SERVO


CN601
52745-1890
COIL_U
COIL_U
COIL_W
COIL_W
COILL_V
COILL_V
HALL_GND
Hw(-)
Hw(+)
HALL_VCC
HU(+)
HU(-)
HV(+)
HV(-)
FG(-)
FG_GND
FG_VCC
FG(+)
C601 104
C602 104
C603 104
CAP_U
CAP_W
CAP_V
HALL_GND
HW-
HW+
HALL_VCC
HU+
HU-
HV+
HV-
FG-
FG+
CN602
52745-1990
EOT_SENSOR_3V
EOT_SENSOR_IN
REEL_S_3V
REEL_S_SENSOR
REEL_S_GND
LED_IR_CA
LED_5V
CASS_SW_GND
CASS_SW
REEL_T_3V
REEL_T_SENSOR
REEL_T_GND
MIC_VCC
MIC_DATA
REC_SW
MIC_SCL
MIC_GND
START_SENSOR_3V
START_SENSOR_IN
R601 100K
R602 270
R603 56
R604 270
R605 100K
R606 330K/F
R607 330K/F
S_REEL_SENSOR
T/ELEDK
5S
CC_LOCK
T_REEL_SENSOR
MIC_VDD
MIC_DATA
REC_PROOF
MIC_CLK
CN603
52746-1090
NC
DEW_GND
DEW
L/M_REV
L/M_REV
COMMON_MODE
SIGNAL1
SIGNAL2
L/M_FWD
L/M_FWD
R609 39K/F
R610 100K/F
R611 10K/F
R612 6.8K/F
C605 102
C606 104
DEW_SENSOR
L/M_REV
SYS3V
MODE_SW_AD
L/M_FWD
CN604
52746-1190
DRUM_W
DRUM_W
COIL_COM
GND
SENS_COM
DRUM_PG
DRUM_FG
DRUM_V
DRUM_V
DRUM_U
DRUM_U
C607 474
C608 474
C609 474
R613 68K
R614 20K
R615 20K
R616 100K
C610 104
IC602
NJM2904V
OUT1
IN1-
IN1+
V-
VH
OUT2
IN2-
IN2+
R617 68K
R618 20K
R619 20K
R620 100K
10uH
L601
Q602
2SB1121
C612
10/16V
(3528)
R624 47K
Q603
2SA1774-Q
C611
10/6.3V
(2012)
C613 104
Q604
EMX2
R625 10K/F
R622 2.7K
R623 20K/F
TOP_SENSOR
EOT_SENSOR
T/E_LED
Q601
DTC114EE
HV+
HV-
HW+
HW-
CAP_VS
HALL_VCC
HALL_GND
CAP_FR
FG+
FG-
CAP_FG
DRUM_FG
C615 104
C616 104
C617 104
R649 22K
R650 680K
C618 473
C619 473
C620 104
IC601
LB11990W
C_VIN1
C_VIN2
C_WIN1
C_WIN2
C_VS
C_W+
C_W-
VCC(5.5V)
C_FR
C_ANGLE
C_FGIN+
C_FGIN-
C_FGOUT
D_FGOUT
D_FGIN2
D_FGIN1
D_FGIN
D_VREF
D_PGIN
D_PGC
D_PGOUT
GND
D_WIN
D_VIN
D_UIN
D_COM
VCC1(3V)
D_FC2
D_FILTER
D_FC1
D_OSC
D_FR
C_CAP_ON
L_UNLOAD
L_LOAD
L_VS
AMP-_IS_REEL
AMP+_IS_REEL
AMP-_OUTS_REEL
AMP-_OUTT_REEL
AMP+_IT_REEL
D_SEL_CSLP
D_CSLP1
D_CSLP2
BRG
D_DRUM_ON
C_VIN2
C_UIN2
C_UIN1
C_WOUT
C_RF
C_VOUT
NC
C_UOUT
D_WOUT
D_RF
D_VOUT
D_UOUT
D_VS
L_OUT2
L_RF
L_OUT1
L_RS
NC
C_CAP_ON
L_UNLOAD
L_LOAD
L_VS
HU-
HU+
CAP_W
CAP_V
CAP_U
DRUM_W
DRUM_V
DRUM_U
L/M_FWD
L/M_REV
5S
S_REEL_SENSOR
T_REEL_SENSOR
R626 1
R627 1
R628 1
R629 1
R630 1
(2012)
R636 33K
R637 33K
R643 30K
R644 30K
R652 1M
R653 22K
C621 105
C622 101
C623 101
C624 101
C625 333
C626 104
C627 104
C628 104
C629 104
C631 222
C632 222
CAP_ON
UNLOAD
LOAD
DC/DC
SS5V
SS3V
DRUM_VS
CAP_VS
SYS3V
SS5V
UNREG
SS3V
DRUM_VS
CAP_VS
SYS3V
TIMER
MIC_VDD
MIC_DATA
MIC_CLK
CC_LOCK
DEW_SENSOR
MIC_VDD
MIC_DATA
MIC_CLK
CC_LOCK
DEW_SENSOR
VIDEO
T_REEL_FG
S_REEL_FG
CAP_FG
DRUM_FG
DRUM_PG
T_REEL_FG
S_REEL_FG
CAP_FG
DRUM_FG
DRUM_PG
SYSCON
CC_LOCK
MODE_SW_AD
REC_PROOF
TOP_SENSOR
EOT_SENSOR
CC_LOCK
MODE_SW_AD
REC_PROOF
TOP_SENSOR
EOT_SENSOR
T/E_LED
LOAD
UNLOAD
CAP_ON
CAP_FR
DRUM_ON
T/E_LED
LOAD
UNLOAD
CAP_ON
CAP_FR
DRUM_ON
D_FG
D_FG/PG_COMMON
D_PG
DRUM_PG
COIL_COM
DRUM_ON
T_REEL_FG
S_REEL_FG

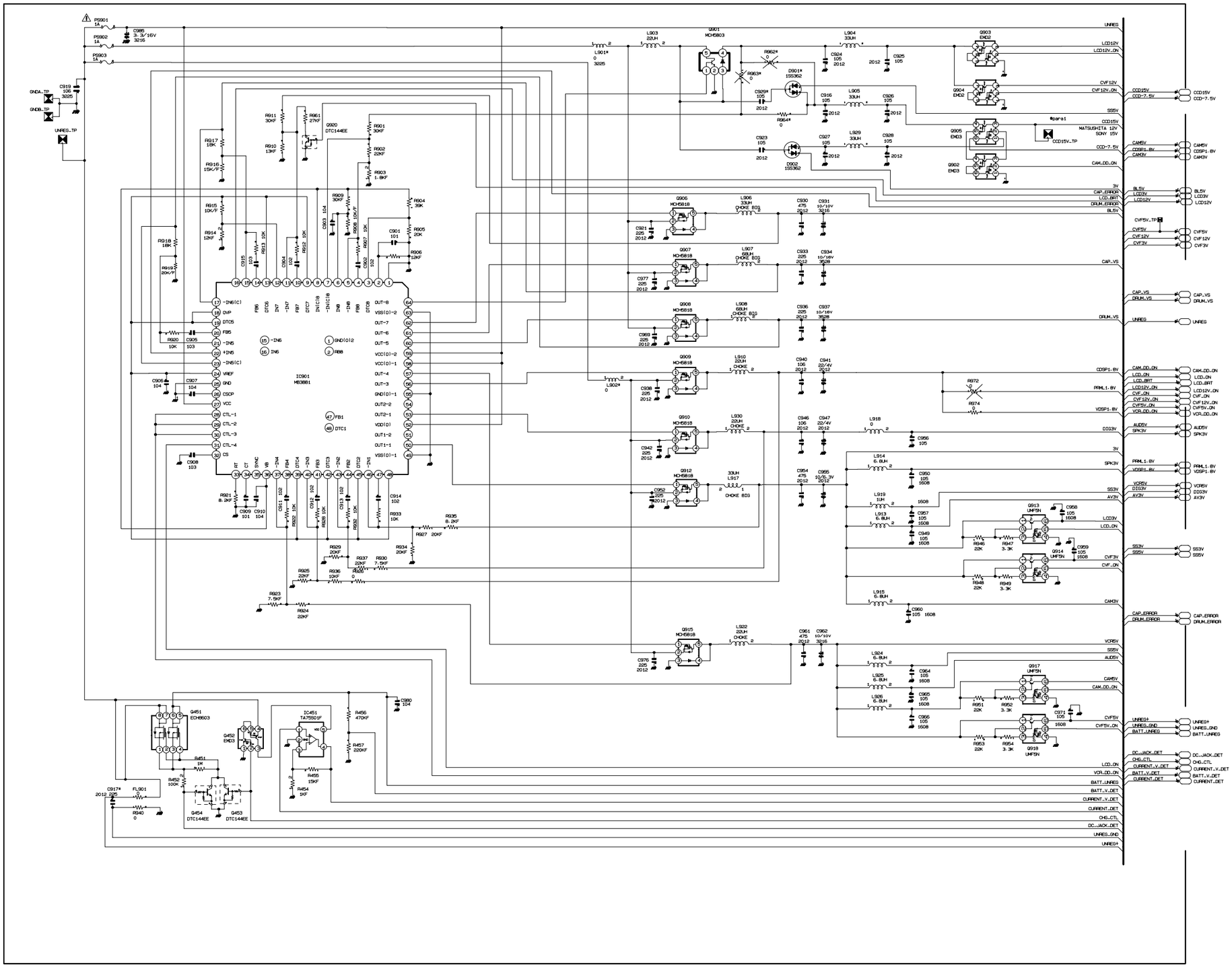
5-5 SYSCON

IC701
uPD703166Y-D
FROM/TO DC/DC
FROM/TO DV_1CHIP
FROM/TO 1394 PHY
TO PRML
FROM/TO CAMERA
FROM/TO AUDIO
FROM/TO VIDEO I/F
FROM/TO SERVO
IC703 XC6413F70MR
IC702 R5C372A
IC706 TK71250SC
IC707 XC6413C28MR
IC708 NC7SV08
IC705 S524A80X91
Q701 2SA1774
Q702 DTC144EE
Q703 DTC144EE
Q704 DTC144EE
D701 1SS400TL
D702 1SS400TL
X701 12.5MHZ
X702 32.768KHZ
CN702 52559-1290
CN703 52746-1490
CN704 0.8MM-18P
CN705 53309-1891
CN701 54102-0208

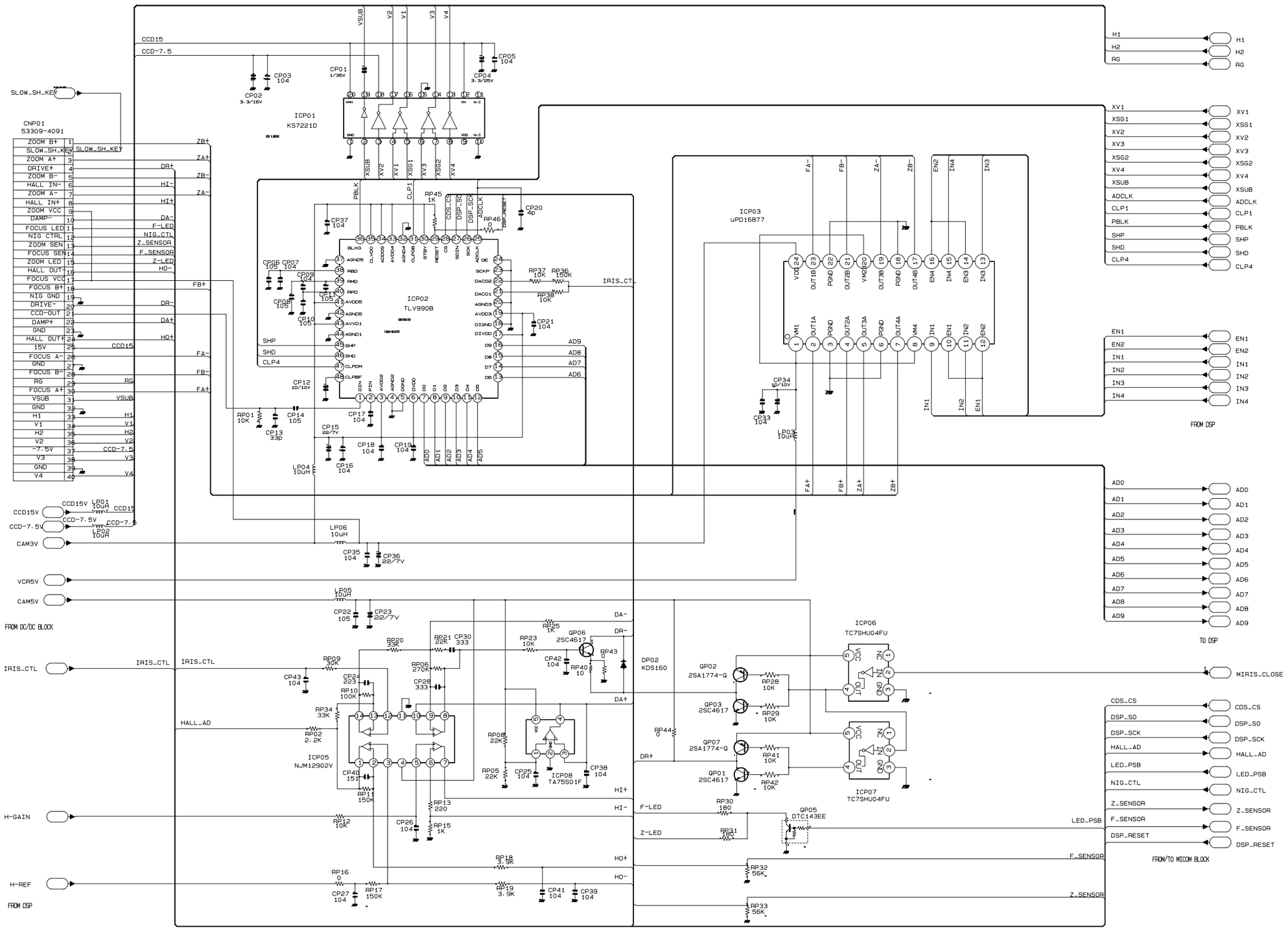
5-6 AUDIO


MIC_R_TP
MIC_L_TP
MIC_L
MIC_R
E_MICR_TP
E_MICL_TP
EXT_MIC_R
EXT_MIC_L
EXT_MIC_GND
L846 1uH
L847 1uH
R859 6.8K
R858 6.8K
C881 102
C882 102
R860 0
C872 101
C873 10/6.3
R857 560
R856 10K
C871 224
C870 224
C869 1/16V
C868 104
C867 10/6.3
C866 224
C865 224
R871 2.2K
R870 2.2K
C863 101
C864 10/6.3
R855 560
R854 10K
PREOL
PRENL
EXTL
INTL
MAF
MPWR
MVDD
MVSS
INTR
EXTR
PRENR
PREOR
SPK+
SPK-
AUD_MUTE
AUD_PWDN
R880 0
1 SP0
2 MUTE
3 SP1
4 PDN
5 SVDD
6 SVSS
7 SCLK
8 MCLK
9 LRCK
10 CDTI
11 CSN
12 CCLK
C874 104
C875 10/6.3
IC841
AK4564
BEEP1 36
MIN 35
MOUT 34
VCOM 33
AVDD 32
AVSS 31
HVCM 30
MUTET 29
HVDD 28
HPR 27
HPL 26
BEEP2 25
C862 105
C860 104
C861 4.7/6.3
C857 104
C859 10/6.3
C856 104
C858 4.7/6.3
C854 104
C853 4.7/6.3V
C855 10/6.3
R853 470
C852 10/6.3
R852 470
C851 10/6.3
TPM3V
TPR1 0
TPR2 0
TPR3 0
TPR4 0
TPR5 0
TPM1
TPM2
TPM3
TPM4
TPM5
DC/DC
L841 33UH
L842 33UH
L843 33UH
SPK3V
AV3V
AUD5V
SYSCON
MIC_L
MIC_R
AIF_CS
AOSD_CLK
AOSD_DATA
EAR_R
EAR_L
EAR_JACK_DET
R875 10K
R874 100K
VIDEO
EXT_MIC_GND
EXT_MIC_R
EXT_MIC_L
SPK-
SPK+
AUD_SCLK
AUD_MCLK
AUD_LRCK
AUD_SDTI
AUD_SDTO
RN841 1K
R862 1K
AUD_A_TP
AUD_L_TP
A_OUT_R
A_OUT_L
EAR_L
EAR_R
CLK_6.75M
Q841 EMD2
Q842 EMX2
Q843 EMX2
R881 2.2K
R882 2.2K
R883 2.2K
R884 2.2K
SDTI 13
SDTO 14
DVDD 15
DVSS 16
LIN1 17
LOUT1 18
RIN1 19
ROUT1 20
LIN2 21
LOUT2 22
RIN2 23
ROUT2 24
C841 104
C842 10/6.3
C843 1/16V
R844 1K
R845 22K
C844 1/16V
R846 22K
R847 1K
C847 1/16V
R843 22K
R848 22K
C845 472
C848 472
R863 10
R876 10K
C884 10/6.3
IC843 ML2201
ST
PDWN
PI
XT
GND
XT
AOUT
VDD
R864 1K
R865 1K
R866 100K
R868 1K
R869 470
VOICE_DATA
VOICE_CS
VOICE_PWDN
CLK_6.75M

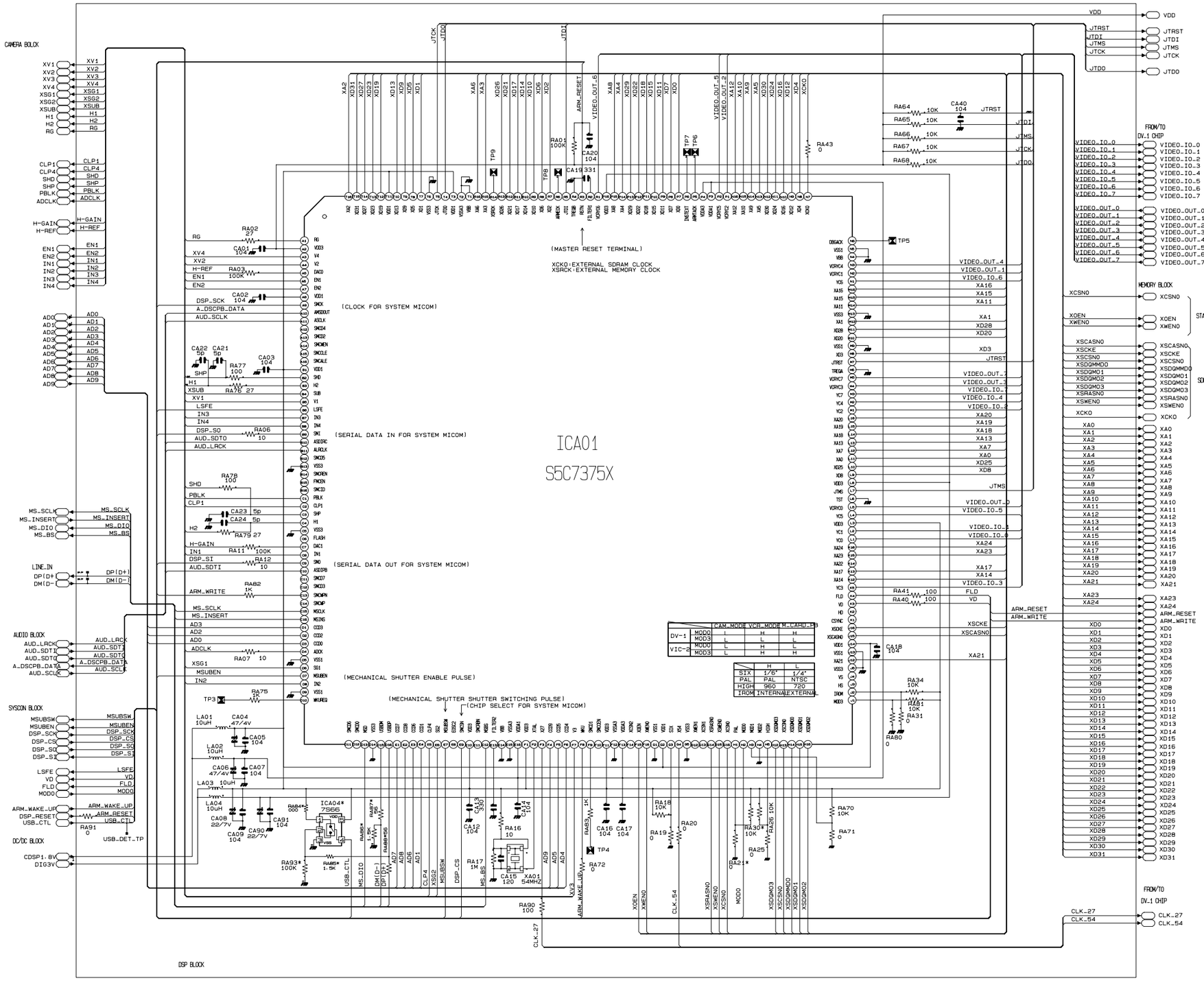
5-7 DC/DC CONVERTER



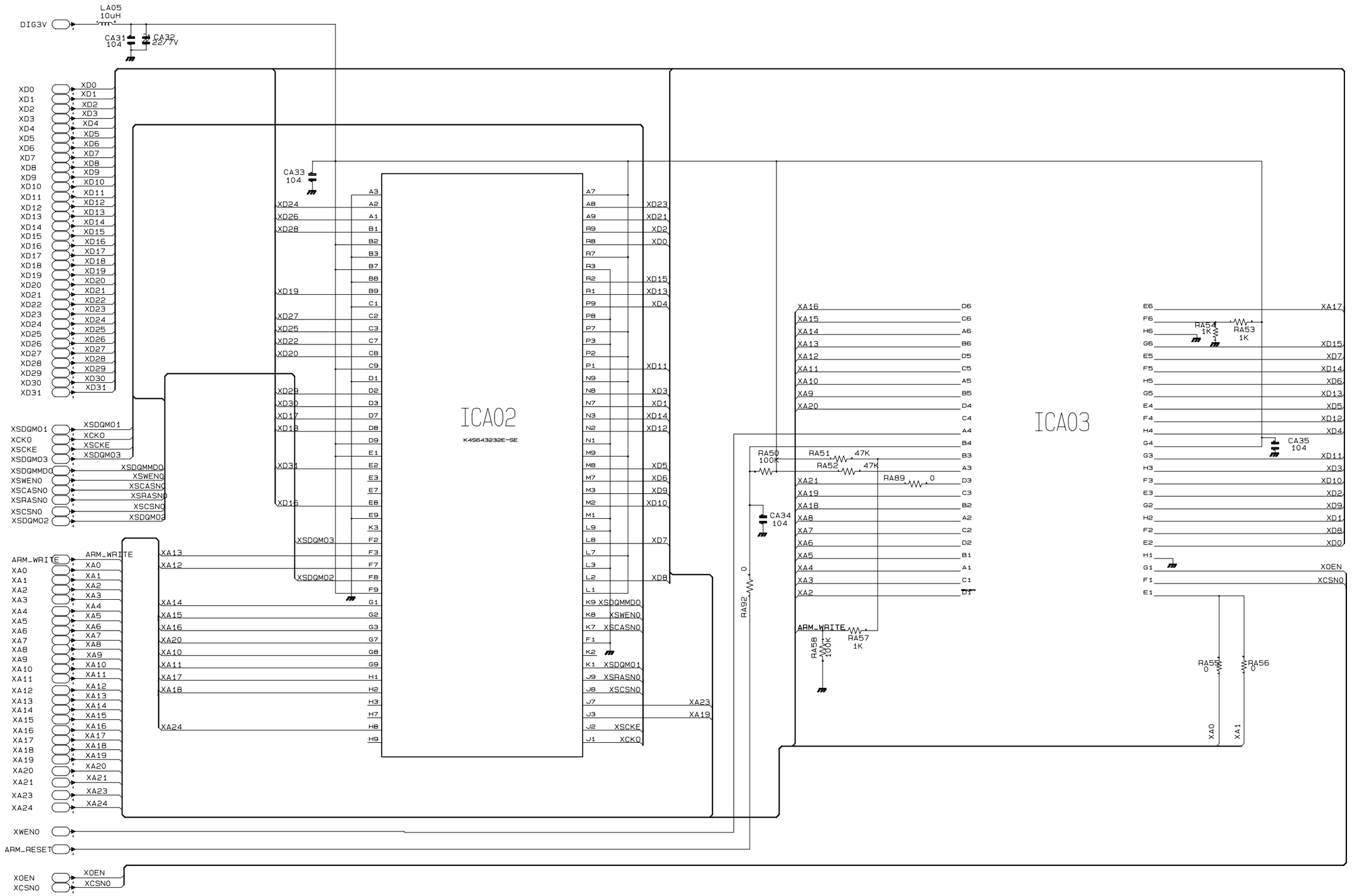
5-8 Camera Process



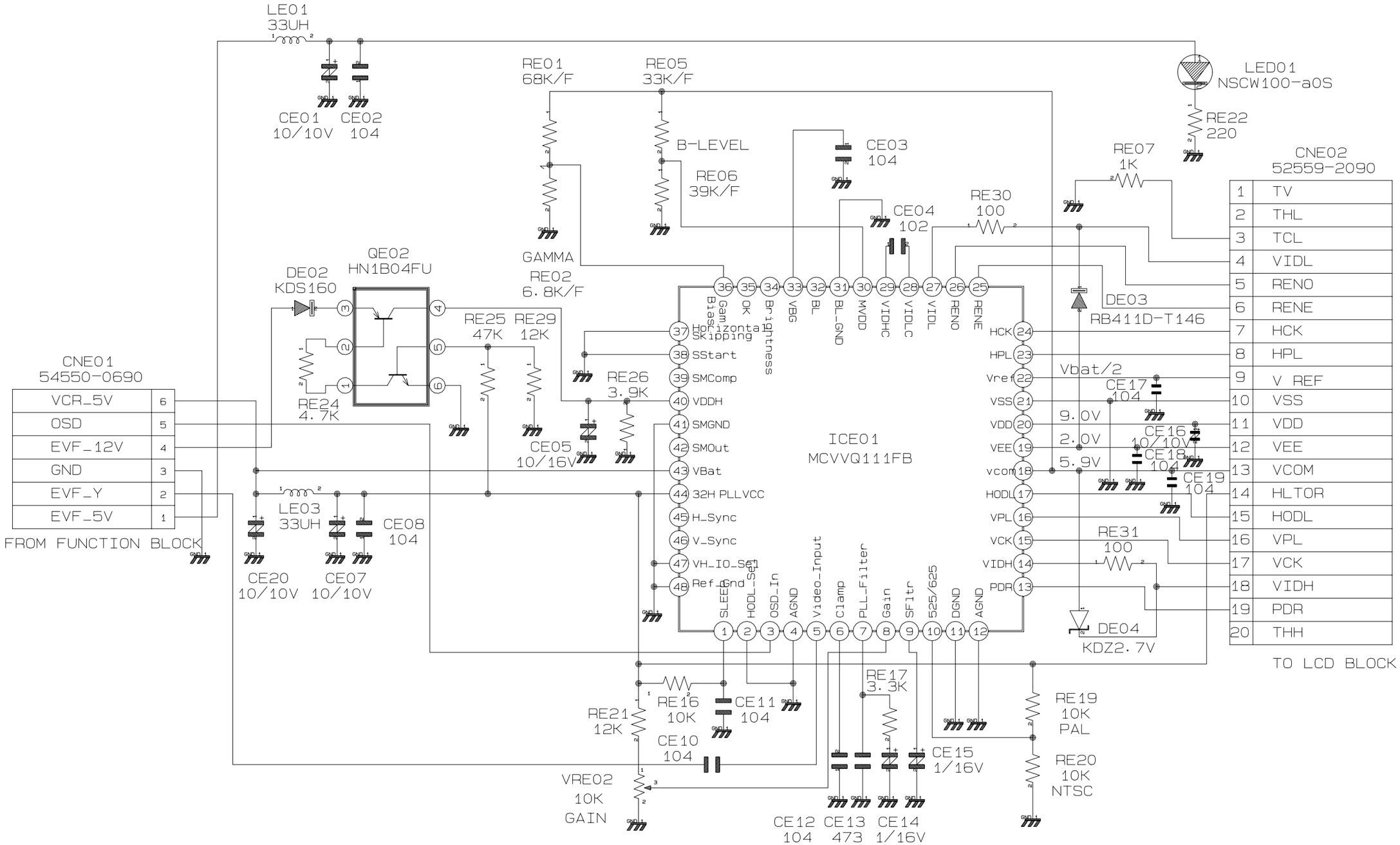
5-9 Camera DSP



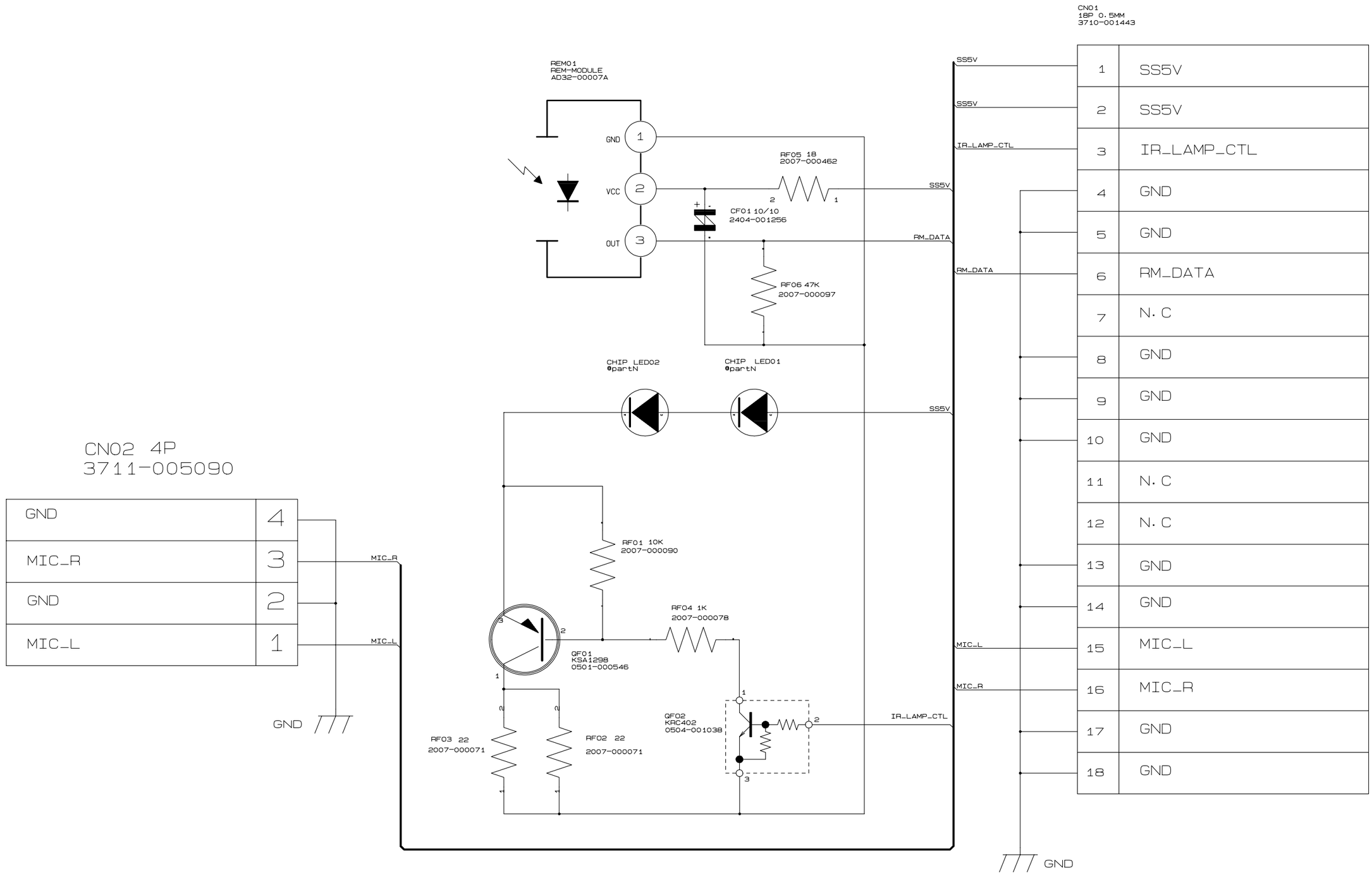
5-10 Camera Memory Block



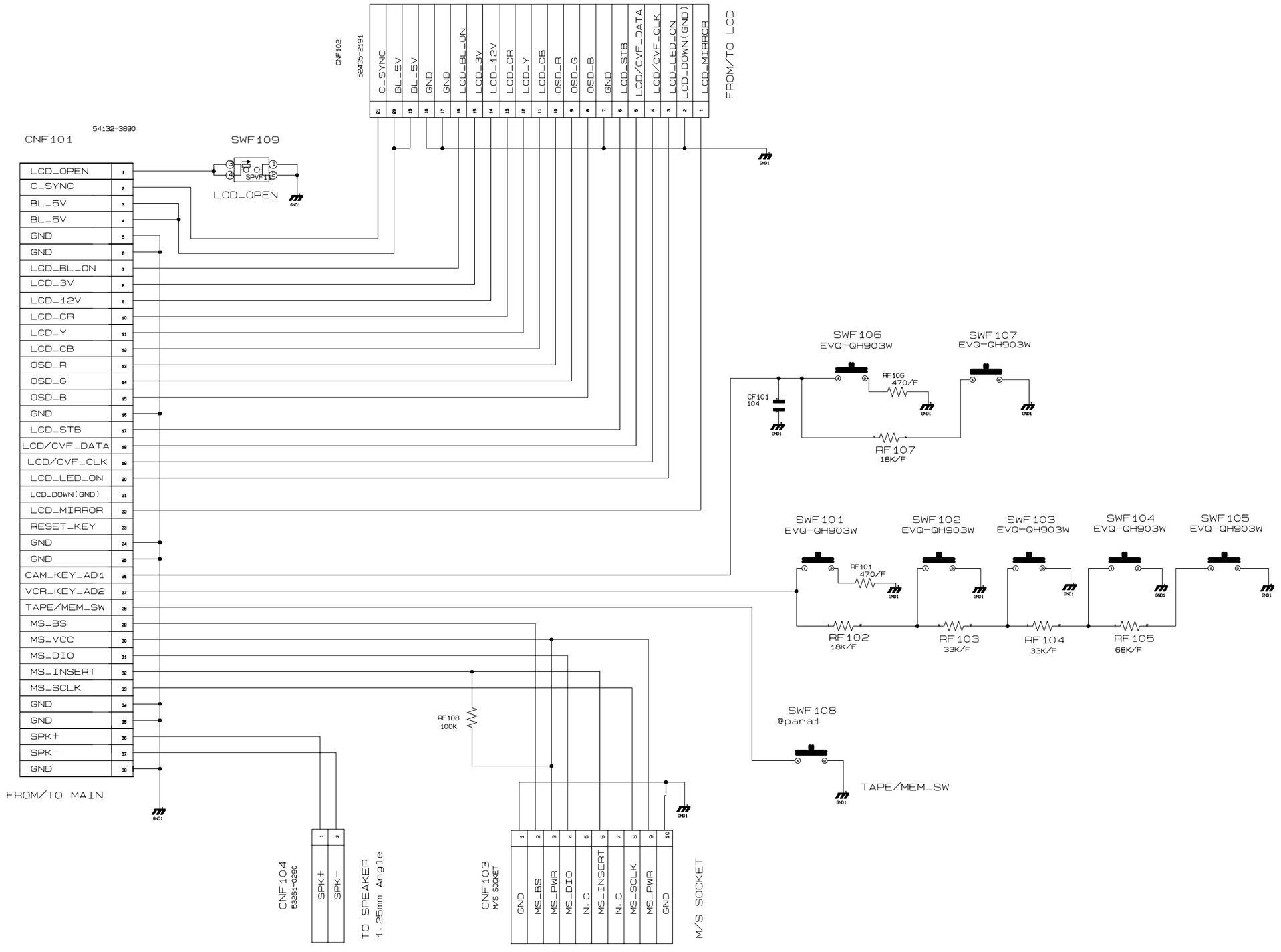
5-11 EVF


LE01
33UH
CE01
10/10V
CE02
104
RE01
68K/F
RE05
33K/F
B-LEVEL
RE06
39K/F
CE03
104
CE04
102
RE30
100
RE07
1K
LED01
NSCW100-a0S
RE22
220
CNE02
52559-2090
1 TV
2 THL
3 TCL
4 VIDL
5 RENO
6 RENE
7 HCK
8 HPL
9 V REF
10 VSS
11 VDD
12 VEE
13 VCOM
14 HLTOR
15 HODL
16 VPL
17 VCK
18 VIDH
19 PDR
20 THH
TO LCD BLOCK
GAMMA
RE02
6.8K/F
QE02
HN1B04FU
DE02
KDS160
RE24
4.7K
RE25
47K
RE29
12K
RE26
3.9K
CE05
10/16V
DE03
RB411D-T146
Vbat/2
CE17
104
9.0V
CE16
10/10V
2.0V
CE18
104
5.9V
CE19
104
RE31
100
DE04
KDZ2.7V
CNE01
54550-0690
VCR_5V 6
OSD 5
EVF_12V 4
GND 3
EVF_Y 2
EVF_5V 1
FROM FUNCTION BLOCK
LE03
33UH
CE08
104
CE20
10/10V
CE07
10/10V
ICE01
MCVVQ111FB
36 Gamma Bias
35 OK
34 Brightness
33 VBG
32 BL
31 BL_GND
30 MVDD
29 VIDHC
28 VIDLC
27 VIDL
26 RENO
25 RENE
37 Horizontal Skipping
38 SStart
39 SMComp
40 VDDH
41 SMGND
42 SMOut
43 VBat
44 32H PLLVCC
45 H_Sync
46 V_Sync
47 VH_IO_Set
48 Ref_Gnd
HCK 24
HPL 23
Vref 22
VSS 21
VDD 20
VEE 19
vcom 18
HODL 17
VPL 16
VCK 15
VIDH 14
PDR 13
1 SLEEP
2 HODL_Set
3 OSD_In
4 AGND
5 Video_Input
6 Clamp
7 PLL_Filter
8 Gain
9 SFltr
10 525/625
11 DGND
12 AGND
RE21
12K
RE16
10K
CE11
104
CE10
104
VRE02
10K
GAIN
RE17
3.3K
CE15
1/16V
CE12
104
CE13
473
CE14
1/16V
RE19
10K
PAL
RE20
10K
NTSC

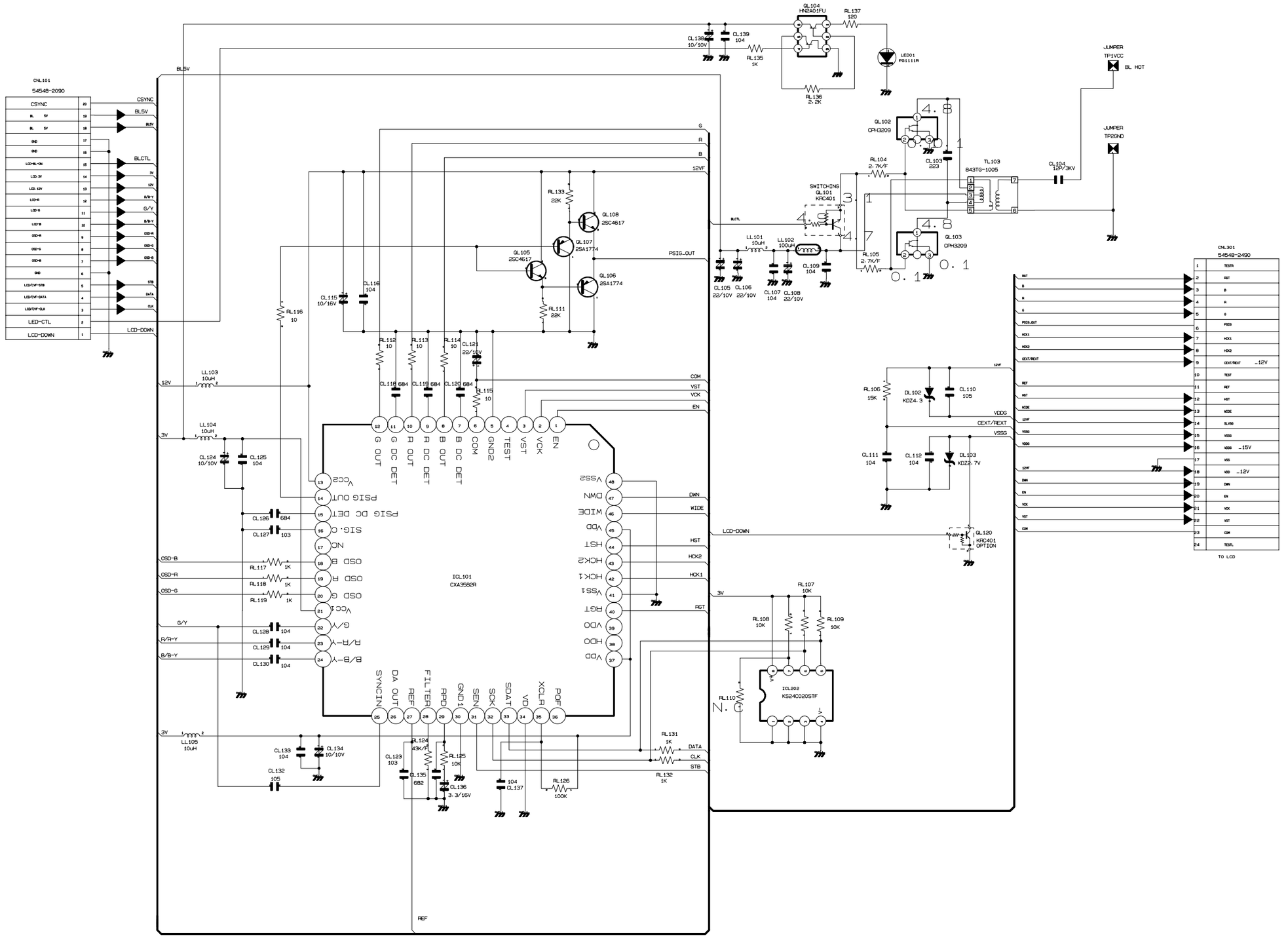
5-12 Front


CN01
18P 0.5MM
3710-001443
1 SS5V
2 SS5V
3 IR_LAMP_CTL
4 GND
5 GND
6 RM_DATA
7 N.C
8 GND
9 GND
10 GND
11 N.C
12 N.C
13 GND
14 GND
15 MIC_L
16 MIC_R
17 GND
18 GND
REM01
REM-MODULE
AD32-00007A
GND
VCC
OUT
RF05 18
2007-000462
CF01 10/10
2404-001256
RF06 47K
2007-000097
CHIP LED02
@partN
CHIP LED01
@partN
RF01 10K
2007-000090
RF04 1K
2007-000078
QF01
KSA1298
0501-000546
RF03 22
2007-000071
RF02 22
2007-000071
QF02
KRC402
0504-001038
CN02 4P
3711-005090
GND 4
MIC_R 3
GND 2
MIC_L 1
SS5V
IR_LAMP_CTL
RM_DATA
MIC_L
MIC_R
GND

5-13 Function



5-14 LCD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54548-2090
CSYNC
BL 5V
BL 5V
GND
GND
LCD-BL-ON
LCD 3V
LCD 12V
LCD-R
LCD-G
LCD-B
OSD-R
OSD-G
OSD-B
GND
LCD/DAT-STB
LCD/DAT-DATA
LCD/DAT-CLK
LED-CTL
LCD-DOWN
BL5V
BLCTL
G/Y
R/R-Y
B/B-Y
STB
DATA
CLK
QL104 HN2A01FU
RL137 120
CL138 10/10V
CL139 104
RL135 1K
RL136 2.2K
LED01 PG1111R
JUMPER TP1VCC
BL HOT
JUMPER TP2GND
QL102 CPH3209
CL103 223
TL103 843TG-1005
CL104 120/3KV
RL104 2.7K/F
SWITCHING QL101 KRC401
RL105 2.7K/F
QL103 CPH3209
LL101 10uH
LL102 100uH
CL105 22/10V
CL106 22/10V
CL107 104
CL108 22/10V
CL109 104
PSIG_OUT
RL133 22K
QL108 2SC4617
QL107 2SA1774
QL105 2SC4617
QL106 2SA1774
RL111 22K
RL116 10
CL115 10/16V
CL116 104
RL112 10
RL113 10
RL114 10
CL121 22/10V
CL118 684
CL119 684
CL120 684
RL115 10
LL103 10uH
LL104 10uH
CL124 10/10V
CL125 104
CL126 684
CL127 103
CL128 104
CL129 104
CL130 104
RL117 1K
RL118 1K
RL119 1K
OSD-B
OSD-R
OSD-G
G/Y
R/R-Y
B/B-Y
ICL101 CXA3582R
G OUT
G DC DET
R OUT
R DC DET
B OUT
B DC DET
COM
GND2
TEST
VST
VCK
EN
VCC2
PSIG OUT
PSIG DC DET
SIG. C
NC
OSD B
OSD R
OSD G
VCC1
G/Y
R/R-Y
B/B-Y
VSS2
DWN
WIDE
VDD
HST
HCK2
HCK1
VSS1
RGT
VDD
HDO
VDD
SYNCIN
DA OUT
REF
FILTER
RPD
GND1
SEN
SCK
SDAT
VD
XCLR
POR
LL105 10uH
CL133 104
CL134 10/10V
CL132 105
RL124 43K/F
RL125 10K
CL123 103
CL135 682
CL136 3.3/16V
104 CL137
RL126 100K
RL131 1K
RL132 1K
DATA
CLK
STB
RST
RGT
HST
HCK2
HCK1
VST
VCK
DWN
WIDE
EN
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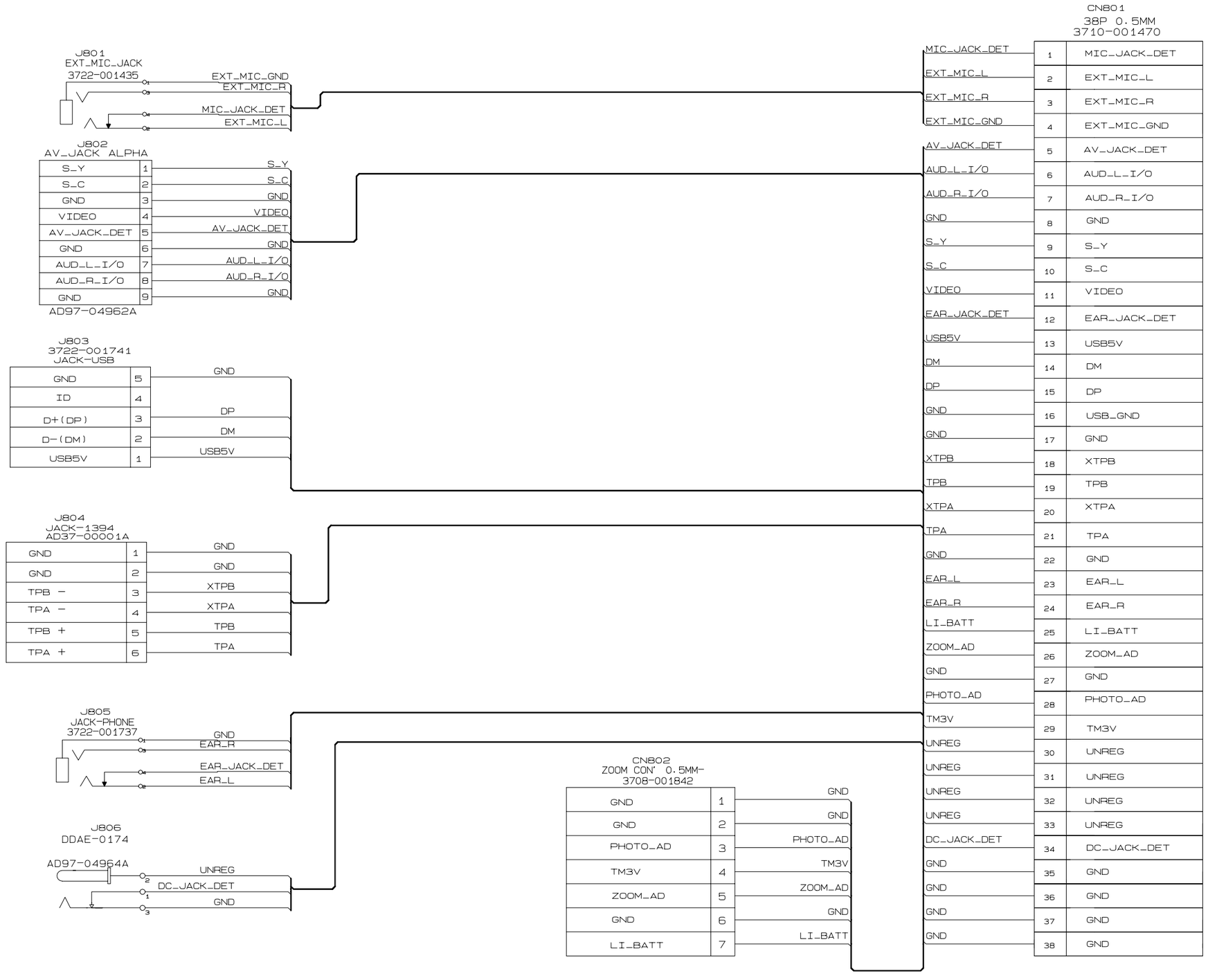
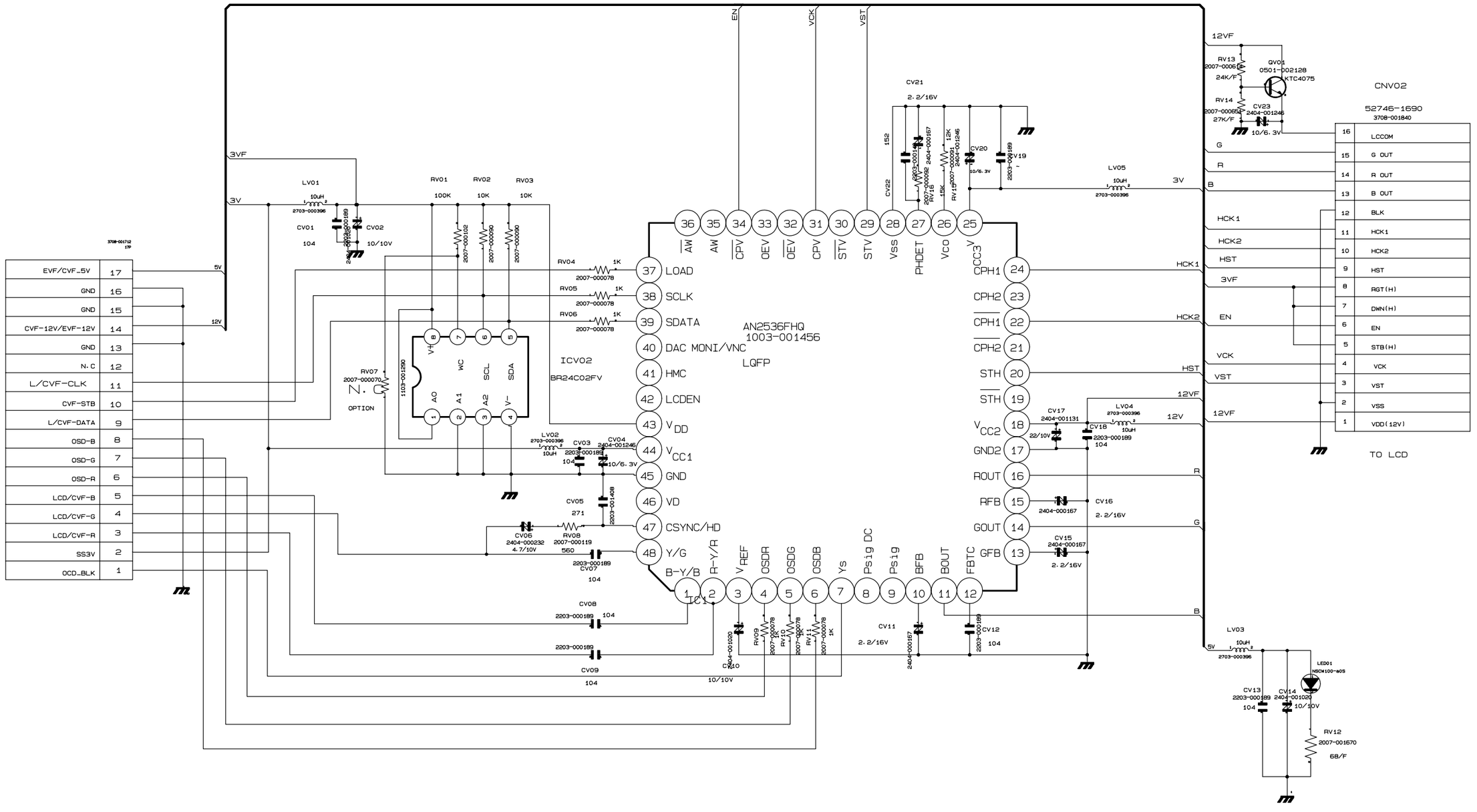
CL110 105
CL111 104
CL112 104
DL103 KDZ2.7V
VDDG
CEXT/REXT
VSSG
LCD-DOWN
QL120 KRC401 OPTION
RL107 10K
RL108 10K
RL109 10K
RL110
ICL202 KS24C020STF
CNL301
54548-2490
TESTR
RST
B
R
G
PSIG-OUT
HCK1
HCK2
CEXT/REXT
TEST
REF
HST
WIDE
SLVSS
VSSG
VDDG
VSS
VDD
DWN
EN
VCK
VST
COM
TESTL
-12V
-15V
-12V
TO LCD

5-15 Jack Board



5-16 CVF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GND 16
GND 15
CVF-12V/EVF-12V 14
GND 13
N.C 12
L/CVF-CLK 11
CVF-STB 10
L/CVF-DATA 9
OSD-B 8
OSD-G 7
OSD-R 6
LCD/CVF-B 5
LCD/CVF-G 4
LCD/CVF-R 3
SS3V 2
OCD_BLK 1
5V
12V
3VF
3V
LV01 10uH 2703-000396
CV01 104
CV02 10/10V
RV01 100K
RV02 10K
RV03 10K
RV04 1K 2007-000078
RV05 1K 2007-000078
RV06 1K 2007-000078
LOAD
SCLK
SDATA
DAC MONI/VNC
HMC
LCDEN
VDD
VCC1
GND
VD
CSYNC/HD
Y/G
B-Y/B
R-Y/R
VREF
OSDR
OSDG
OSDB
YS
Psig DC
Psig
BFB
BOUT
FBTC
AN2536FHQ
1003-001456
LQFP
ICV02
BR24C02FV
RV07 2007-000070 OPTION
1103-001250
LV02 2703-000396 10uH
CV03 2203-000189 104
CV04 2404-001246 10/6.3V
CV05 271
CV06 2404-000232 4.7/10V
RV08 2007-000119 560
CV07 104
CV08 2203-000189 104
CV09 104
CV10 10/10V
CV11 2.2/16V
CV12 2203-000189 104
EN
VCK
VST
CV21 2.2/16V
CV22 152
CV20 10/6.3V
CV19
RV16 15K
RV15 12K
LV05 10uH 2703-000396
CPH1
CPH2
STH
VCC2
GND2
ROUT
RFB
GOUT
GFB
CV17 2404-001131 22/10V
CV18 2203-000189 104
LV04 2703-000396 10uH
CV16 2404-000167 2.2/16V
CV15 2404-000167 2.2/16V
12VF
RV13 2007-000065 24K/F
QV01 0501-002128 KTC4075
RV14 2007-000054 27K/F
CV23 2404-001246 10/6.3V
CNV02
52746-1690
3708-001840
LCCOM
G OUT
R OUT
B OUT
BLK
HCK1
HCK2
HST
RGT(H)
DWN(H)
EN
STB(H)
VCK
VST
VSS
VDD(12V)
TO LCD
LV03 10uH 2703-000396
LED01 NSCW100-mOS
CV13 2203-000189 104
CV14 2404-001020 10/10V
RV12 2007-001670 68/F

MEMO

SAMSUNG

DIGITAL VIDEO CAMCORDER

Chassis : Theta
SCD30/SCD31/SCD33/SCD34/SCD39
VP-D30/D31/D33/D34/D39
VP-D30i/D31i/D33i/D34i/D39i

ADJUST Manual

◆ This Manual is for only Alignment and Adjustment method of “Thata” Chassis.
◆ File with the Service Manual.

SAMSUNG ELECTRONICS

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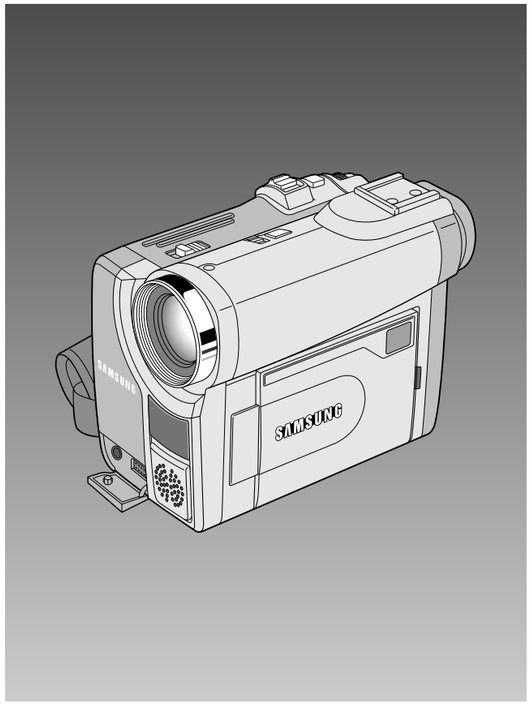
AD82-00015A

DIGITAL VIDEO CAMCORDER



CONTENTS

1. VCR Adjustment
2. Camera Adjustment
3. LCD Adjustment
4. Deck Adjustment

1. VCR Adjustment

1-1 VCR Adjustment Preparation

1) How to get into the VCR adjust mode

STEP 1

❶ Connect the power source.
❷ Set the power switch to “TAPE” position.

STEP 2

❶ Press and hold the "STOP" and "PB ZOOM" buttons on the video camera at the same time for more than 5 seconds.
❷ When monitor OSD appears as shown Fig. 1-2, the adjustment mode has been activated successfully.
❸ Move the “MENU Selector” to highlight VCR ADJ and push the “MENU Selector”. (See Fig. 1-3)
❹ When changing the adjustment item, please press the “EASY” and “DISPLAY” buttons on the video camera.
❺ You can change the adjustment value to move the “MENU Selector” Up or Down.
❻ After setting adjustment value, please push the “MENU Selector” to confirm Data.

STEP 3

If you want to finish the adjustment mode, you have to do Power Reset.
The Power Reset means that you pull out the power source and pull in it again.

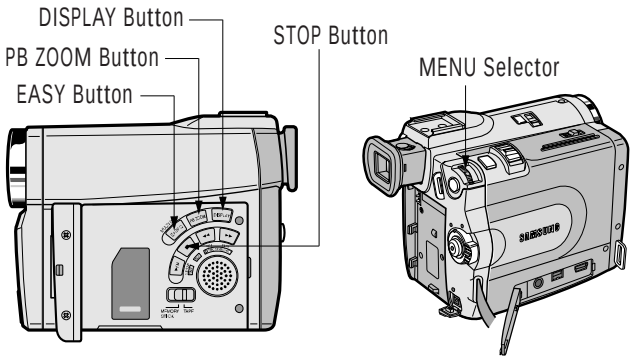


Fig. 1-1

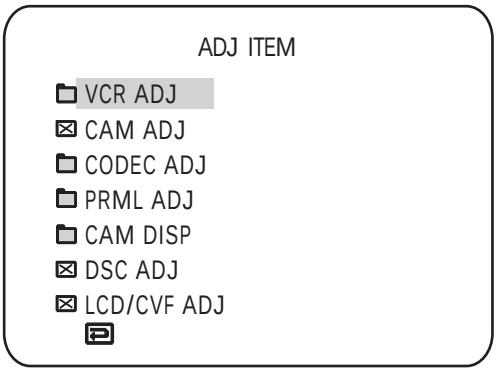


Fig. 1-2

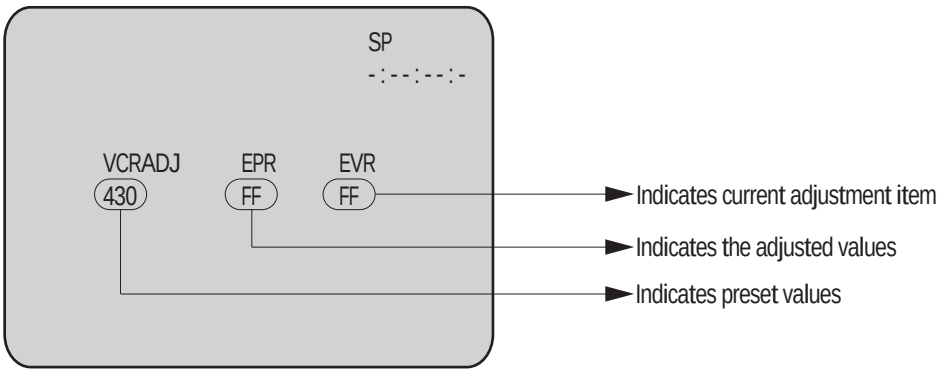


Fig. 1-3

2) Function of each buttons on the SET Key

<Table 1-1>

Buttons	Description
MENU Selector push (Confirm)	Stores changed value in the adjustment and auto adjustment mode.
MENU Selector down (Data Down)	Changes data in the adjustment state.
MENU Selector up (Data Up)	
EASY (Mode Up)	Changes mode.
DISPLAY (Mode Down)	

1-2 VCR Adjustment

<Table 1-2>

Model(Address)	Name	Value	Description
437	SWP Position	80	Head Switching Position Adjust

1) How to adjust Head Switching Position

❶ Get into VCR ADJUST mode.
❷ Move to the VCR ADJUST address “437”.
❸ Play standard tape, and “Head Switching Position” will be adjusted automatically.

2. Camera Adjustment

Note : How to adjust the camera system.

1) EEPROM stores confirmed adjustment value of each adjustment step.

2) DSP (Digital Signal Process : ICA01-Camera Main PCB) digitalizes the camera signal.

3) When changing IC705-Main PCB of EEPROM, readjust Main PCB.
While changing LCD PCB and CVF PCB- always readjust each part.
Since EEPROM stores confirmed adjustment value of each adjustment step, readjusting must be performed in order to store the changed data.

4) Adjust the following items after changing LENS Ass'y.

❶ Lens Zoom Track
❷ Auto HALL
❸ Auto IRIS

5) Adjust the following items after changing EEPROM and Main PCB.

❶ Lens Zoom Track
❷ Zoom VR Center
❸ Auto HALL
❹ Auto IRIS
❺ Auto White Balance (indoor)
❻ Auto White Balance (outdoor)

2-1 Adjustment Preparation

1) Measuring Instrument

❶ DC power supply
❷ Oscilloscope
❸ NTSC Vectorscope, PAL vectorscope
❹ NTSC wave form monitor, PAL wave form monitor
❺ NTSC TV or Monitor, PAL TV or Monitor
❻ Color bar chart
Gray scale chart

2) Camera PCB configuration

❶ Main PCB
❷ CCD PCB
❸ LCD PCB
❹ CVF PCB

3) Before you start

❶ Use the buttons on the SET key when adjusting camera.
❷ Press the push the "MENU Selector" when storing confirmed adjustment value of each adjustment step in EEPROM.
❸ The OSD shows "OK" after finishing each adjustment step.
❹ To clear the adjustment mode, pull out the power source.

4) Function of each buttons on the SET Key

<Table 2-1>

Buttons	Description
MENU Selector push (Confirm)	Stores changed value in the adjustment and auto adjustment mode.
MENU Selector down (Data Down)	Changes data in the adjustment state.
MENU Selector up (Data Up)	
EASY (Mode Up)	Changes mode.
DISPLAY (Mode Down)	

5) How to set up the camera adjustment mode

STEP 1

❶ Connect the power source (battery/DC cable).
❷ Set the power switch to "CAM" position.
❸ The OSD appears.

STEP 2

❶ Press and hold the "STOP" and "PB ZOOM" buttons on the video camera at the same time for more than 5 seconds.
❷ When monitor OSD appears as shown Fig. 2-2, the adjustment mode has been activated successfully.
❸ Move the “MENU Selector” to highlight CAM ADJ and push the “MENU Selector”.
❹ When changing the adjustment item, please press the “EASY” button on the Camera.
❺ You can change the adjustment value to move the “MENU Selector” Up or Down.
❻ After setting adjustment value, please push the “MENU Selector” to confirm Data.

STEP 3

Monitor OSD shows " CAMERA EPR EVR / OCD FF FF ".
Then camera adjustment mode has been activated successfully.

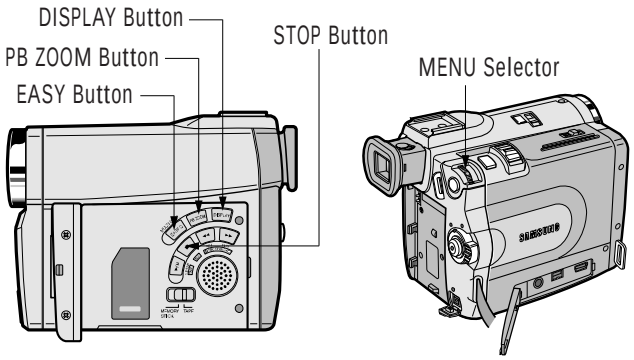


Fig. 2-1

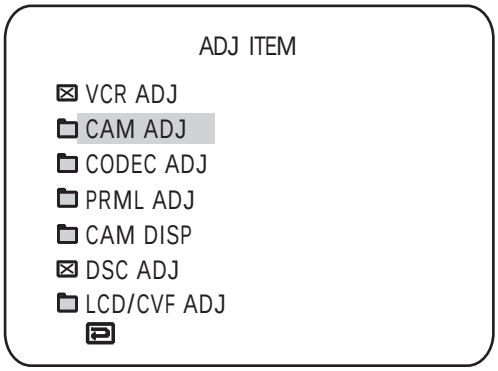


Fig. 2-2

2-2 Camera Adjustment

Note : "XX XX" indicate the previous preset value and adjusted value.
Press the “MENU Selector” (Confirm) to store the adjusted value.

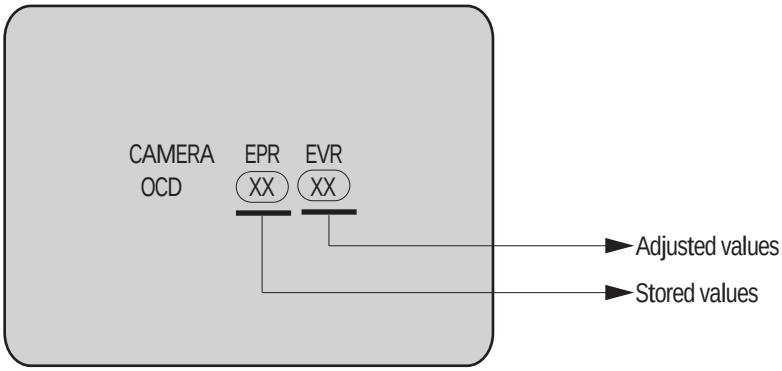


Fig. 2-3

1) EEPROM Data Initialize

Caution : This adjustment must do following items changing new EEPROM (IC705) or Main PCB.

❶ Press the “EASY”(Mode Up)/”DISPLAY”(Mode Down) buttons so that OSD shows “ODF XX XX”.
❷ Using “MENU Selector”(Data Up/Down) so that display data of EVR is “A0”
❸ Press the “MENU Selector” (Confirm).
❹ The OSD shows “OK” after huithing the initalize.

2) Lens Zoom Track

Caution : For whole zoom range, it shall be in focus.
The location of a focus lens is moving depending on the location of Zoom Lens.
During adjusting, micom measures the focus location from a near distance to a long.

❶ Camera is set to E-E mode.
❷ Focus chart photo.
❸ Ensure that camera is left an about 3m distance from a focus chart and the focus of lens is placed vertically.
Attach a focus chart to white or gray wall of a flat surface.
❹ Connect a video output terminal to a TV.
❺ Press the “EASY”(Mode Up)/”DISPLAY”(Mode Down) buttons so that OSD shows "ODE XX XX".
❻ Press the “MENU Selector” (Confirm).
Never impact on the lens when adjusting zoom and focus Lens.
The OSD shows “OK” after finishing the adjustment.

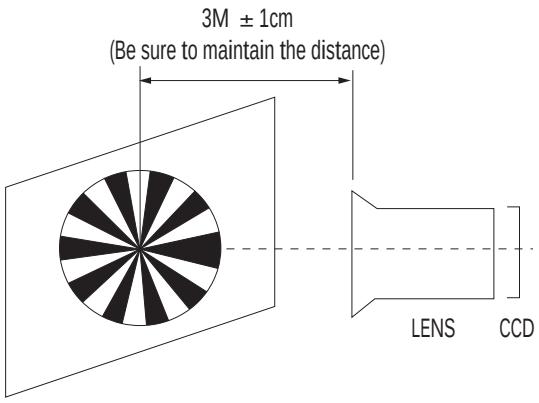


Fig. 2-4

3) Zoom VR Center

❶ Connect a video output terminal to a TV.
❷ Press the “EASY”(Mode Up)/”DISPLAY”(Mode Down) buttons so that OSD shows “OD6 XX XX”.
❸ Press the “MENU Selector” (Confirm).
❹ Then Micom finds out Zoom VR center position.
Store Zoom VR center value in OB7.

4) Auto HALL

❶ Connect a video output terminal to a TV.
❷ Press the “EASY”(Mode Up)/”DISPLAY”(Mode Down) buttons so that OSD shows "OCD XX XX".
❸ Press the “MENU Selector” (Confirm).
❹ Then micom finds out max. Hall value with an iris opened and min. Hall value with an iris closed.
Store max. and min. value of Hall in OAD and OAC respectively.
❺ The OSD shows “OK” after finishing the adjustment.

5) Auto IRIS Level

❶ Connect a video output terminal to a wave form monitor and a TV.
❷ Press the “EASY”(Mode Up)/”DISPLAY”(Mode Down) buttons so that OSD shows "OCE XX XX".
❸ Press the “MENU Selector” (Confirm).
❹ Then micom finds out max. Hall value with an iris opened and min.
Hall value with an iris closed. Store max. and min. value of in OBC, OBD and OBB respectively.
❺ The OSD shows “OK” after finishing the adjustment.

6) Auto White Balance (indoor)

❶ Camera mode & 3100˚ K/5100˚ K gray scale chart.
❷ Connect a video output terminal to a vectorscope and a TV.
❸ Press the “EASY”(Mode Up)/”DISPLAY”(Mode Down) buttons so that OSD shows "OD4 XX XX".
❹ Ensure that camera picks up image 40μs on 3100˚K gray scale chart precisely and the illumination is 1500~2000 Lux.
❺ Press the “MENU Selector” (Confirm) to ensure that white spot on a vectorscope is moving in the middle of screen.
❻ The OSD shows “OK” after finishing the adjustment.

7) Auto White Balance (outdoor)

❶ Camera mode & 3100˚ K/5100˚ K gray scale chart.
❷ Connect a video output terminal to a vectorscope and a TV.
❸ Press the “EASY”(Mode Up)/”DISPLAY”(Mode Down) buttons so that OSD shows "OD5 XX XX".
❹ Ensure that camera picks up image 40 μs on 5100 gray scale chart (3100 gray scale chart + C16 filter) precisely and the illumination is 1500~2000 Lux.
❺ Press the “MENU Selector” (Confirm) to ensure that white spot on a vectorscope is moving in the middle of screen.
❻ The OSD shows “OK” after finishing the adjustment.

3. LCD Adjustment

Note : For LCD adjustment, use the buttons on the video camera and the SET key.
After each adjustment step is completed, OSD shows "OK".
EEPROM(ICL202) stores confirmed adjustment value of each adjustment step.
After finishing the adjustment, turn power off.

3-1 How to get into the LCD adjust mode

STEP 1

❶ Connect the power source (battery/DC cable).
❷ Set the power switch to "REC" position.
❸ Set the Lens to CAMCORDER.
❹ Camera screen and OSD appears.
❺ Open housing of the video camera and remove tape.
❻ Open the LCD.

STEP 2

❶ Press and hold the "STOP" and "PB ZOOM" buttons on the video camera at the same time for more than 5 seconds.
❷ When monitor OSD appears as shown Fig. 3-2, the adjustment mode has been activated successfully.
❸ Move the “MENU Selector” to highlight LCD/CVF ADJ and push the “MENU Selector”.
❹ When changing the adjustment item, please press the “EASY”/”DISPLAY” buttons on the camera.
❺ You can change the adjustment value to move the “MENU Selector” Up or Down.
❻ After setting adjustment value, please push the “MENU Selector” to confirm Data.

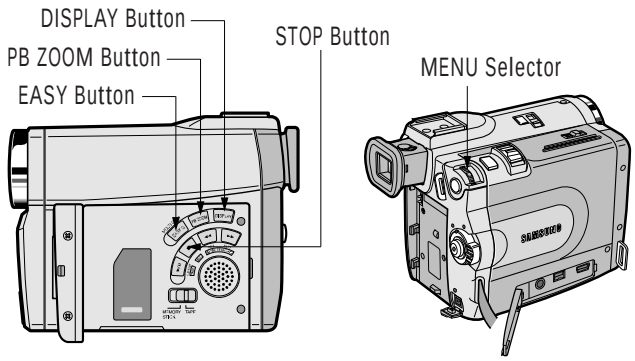


Fig. 3-1

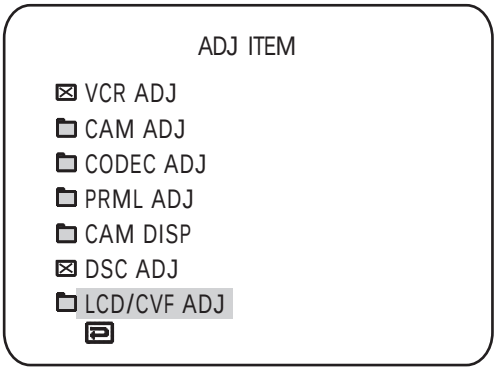


Fig. 3-2

3-2 Function of each buttons on the SET Key

<Table 3-1>

Buttons	Description
MENU Selector push (Confirm)	Stores changed value in the adjustment and auto adjustment mode.
EASY (Mode Up)	Shift adjustment address to left.
DISPLAY (Mode Down)	Shift adjustment address to right.
MENU Selector up (Data Up)	Up value.
MENU Selector down (Data Down)	Down value.

Note : In service adjustment mode, button names are different from those in customer function control mode.

3-3 Adjust Mode

<Table 3-2>

SYSTEM / Address	NTSC		PAL	
	123K LCD	211K LCD	123K LCD	211K LCD
00	55	55	55	55
01	A5	01	A5	03
02	45	00	45	00
03	41	00	41	00
04	98	00	A0	00
05	20	16	17	16
06	49	8A	4B	8A
07	1B	00	1B	00
08	1B	84	1B	84
09	D3	30	D3	30
0A	40	00	40	00
0B	34	B2	34	B2
0C	4A	90	40	90
0D	CE	A0	CE	A0
0E	35	B4	35	B4
0F	17	74	17	74
10	E8	75	E8	75
11	09	00	09	00
12	23	00	23	00
13	04	6A	05	6A
14	00	5F	00	5F
15	0C	C2	10	C2
16	00	88	00	88
17		60		60
18		7F		7F
19		81		88
1A		6A		6A
1B		00		00
1C		03		03
1D		82		82
1E		02		02
1F		02		02
20		70		70
21		07		07
22		03		03

4. Deck Adjustment

4-1 Operation Without Housing Assembly

1) Remove the Housing Ass'y from the recorder unit.
2) Connect the mechanical chassis to the recorder circuit to supply voltage.
3) Set to Unload mode.
4) Press the S/W Push(Keep ON status)to start loading, and push the PLAY Key.
   (Cover the Top/End sensor with black tape, because they do not operate.)

Note : For the removal of the Housing Ass'y.

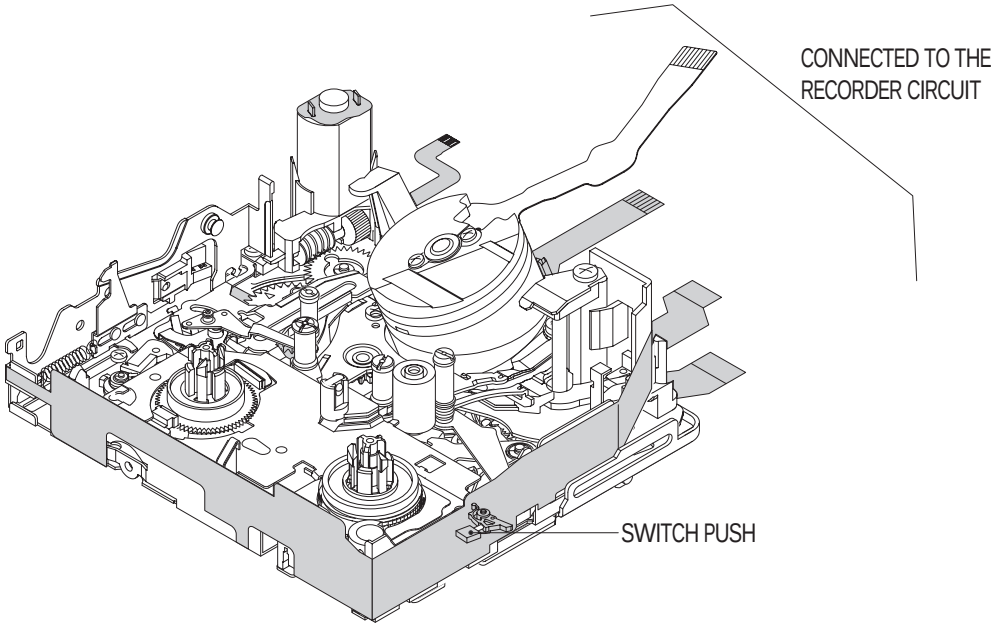


Fig. 4-1

4-2 Setting Mechanical Mode (Without Recorder Circuit)

1) Set the power-supply output to approx.3V.
2) Choose the polarity (depending on whether loading or unloading).
3) Supply the voltage to the Motor Loading, and set to the desired mode.

<Table 4-1>

A	B	Movement of chassis
+	-	Loading
-	+	Unloading

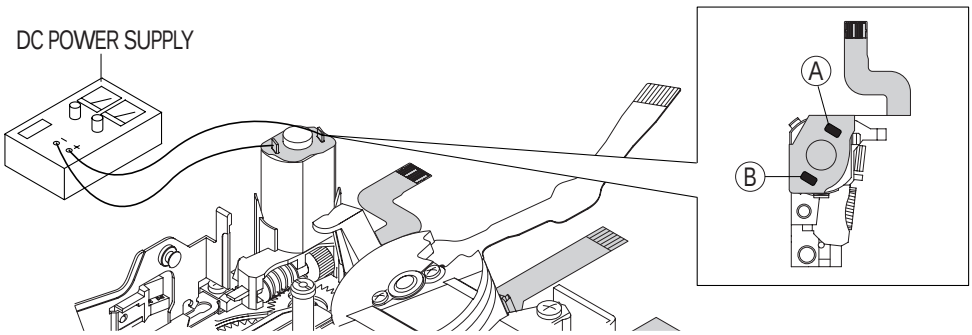


Fig. 4-2

4-3 Maintenance

Carry out the following periodic maintenance checks in order to fully exercise all functions, operations and tape. After repairing, service the set as follows:

1) Cleaning of Drum Assembly

❶ Gently apply lens tissue soaked in ethyl alcohol to the Drum assembly.
Clean the Upper Drum assembly while rotating it slowly counterclockwise(by hand).

Note : Do not rotate the motor by power or rotate the Upper Drum assembly clockwise.
Also, the Head tip will be damaged if the lens tissue is moved in a perpendicular direction.
Be sure to follow these instructions when cleaning the Drum Ass'y

2) Cleaning of Tape Path

❶ In EJECT mode, clean the tape path system(from Pole Tension P1 through Pole Review P7, Pinch Roller and Capstan Shaft) and the Lower Drum. Using the lens tissue soaked in ethyl alcohol.

Note : Make sure that no oil or grease adheres to the lens tissue.

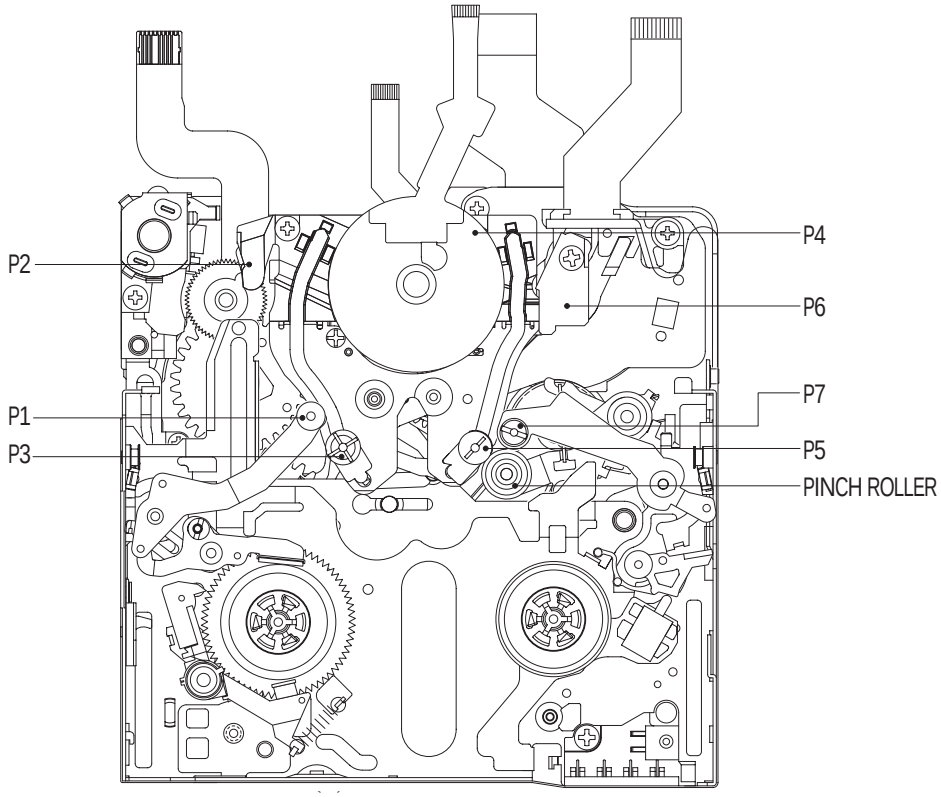


Fig. 4-3

3) Periodic Maintenance and Check List

When overhauling, refer to the following table.

<Table 4-2>

Maintenance checks		Hours of use (H)										Remark
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000	
Tape path system	Cleaning of tape path	O	O	O	O	O	O	O	O	O	O	
	Cleaning and degaussing of drum ass'y	O	O	O	O	O	O	O	O	O	O	
DRIVING SYSTEM	Capstan Shaft		Δ		Δ		Δ		Δ		Δ	- Never let oil get on to the tape path surface.
	Gear Capstan		Δ		Δ		Δ		Δ		Δ	
	Gear Pully Shaft		Δ		Δ		Δ		Δ		Δ	
	Belt Timing		◆		◆		◆		◆		◆	
	Motor Loading		◆		◆		◆		◆		◆	
Perform-ance	Abnormal Noise		◆	◆	◆	◆	◆	◆	◆	◆	◆	
Confir-mation	Back Tension		◆		◆		◆		◆		◆	
	Brake System		◆		◆		◆		◆		◆	
	PB, REV Torque Measurement		◆		◆		◆		◆		◆	

O : Cleaning Δ : COil ◆ : Confirmation

- ◆ When lubrication bearings, be sure to keep the oil free of dust. (Oil contaminated with dust might cause the bearings to wear out or seize.)
- ◆ A "drop"of oil is defined as the amount attached to the tip of a Ø 2mm stick as shown in Fig. 4-4.

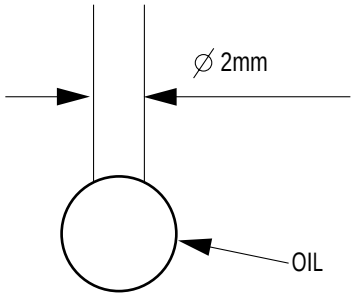


Fig. 4-4

4-4 Mechanical Check and Adjustment

4-4(a) Tension Regulator Adjustment

1) Disassembly

❶ For the removal of the Housing Ass'y.

2) Adjustment

❶ Set to PLAY mode (without cassette tape).
❷ Check that the distance between external surface of Holder Loading and center of Arm Tension is 0~1mm. (Fig. 4-5)
❸ If necessary, proceed to step 4.
❹ If the Arm Tension is located inside the position specified, adjust the Band Adjust Tension toward arrow A. (If it is located outside, adjust toward arrow B.)

Note : Check if the Arm Tension can be moved toward arrow C in PB mode.

3) Reassembly

❶ For the removal of the Housing Ass'y.

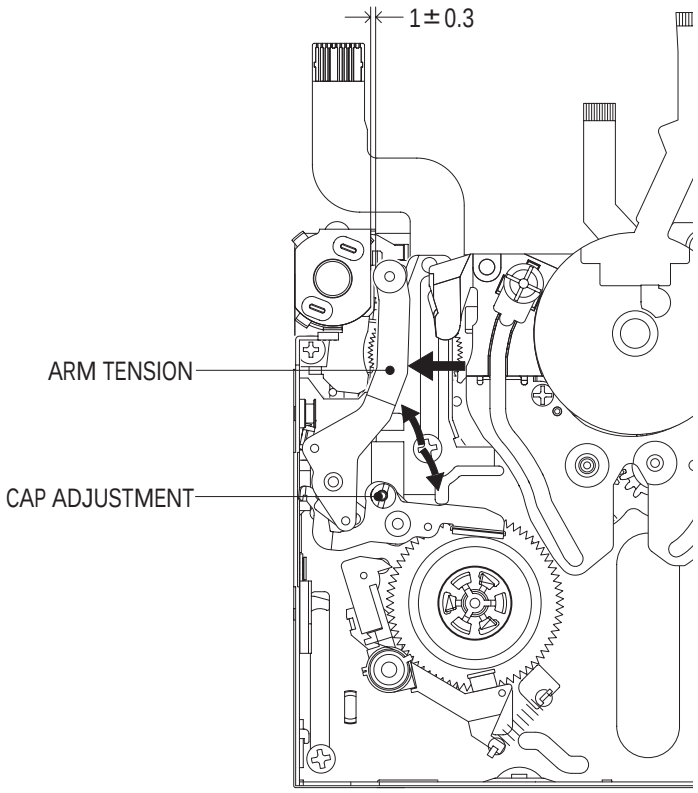


Fig. 4-5

4-4(b) Back Tension Confirmation

1) Set up the cassette-torque tape.
2) Set to CAMERA mode, push the EDIT(+) KEY and check that the torque value of Reel S is 4.5±0.5g.cm.

4-4(c) PB/REV Torque check

1) Set up the cassette torque tape.
2) Set to CAMERA mode, Push the EDIT(+)Key and check that the torque value of Reel T is 7.5±3g.cm.
3) Push the EDIT(-) Key and check that the torque value of Reel S is 12.5±3g.cm.
4) If necessary, replace the defective Gear pully Ass'y.

4-4(d) Reel Table Height Check

1) Removal

❶ For the removal of the Housing Ass'y.
❷ For the removal of the Idler Ass'y.

2) Check

❶ Using vernier calipers, check the following distances : From the upper surface of the PCB Reel to the resting surfaces of Reel S, T table should each be 3.9±0.1mm.

3) Mounting

❶ For the removal of the Idler Ass'y.
❷ For the removal of the Housing Ass'y.

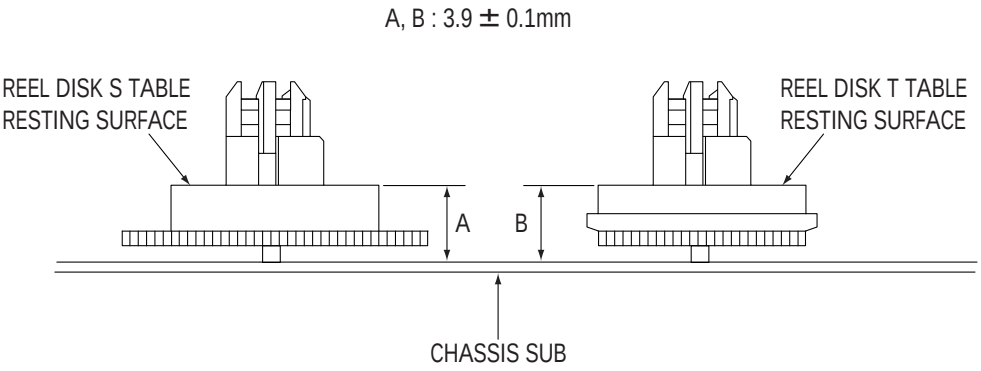


Fig. 4-6

4-5 Tape Path Adjustment

4-5(a) Preparation for Adjustment

❶ Clean the tape running surface(Poles, Drum, Capstan Shaft, Pinch Roller).
❷ Observe the PB RF signal and Head Switching Pulse on an oscilloscope.
❸ Play back the alignment tape.
❹ Check that the waveform of the RF signal is flatat both inlet and outlet(A in Fig. 4-7).
If not flat (B or C in Fig. 4-7), do adjustments 4-5(b) through 4-5(d).

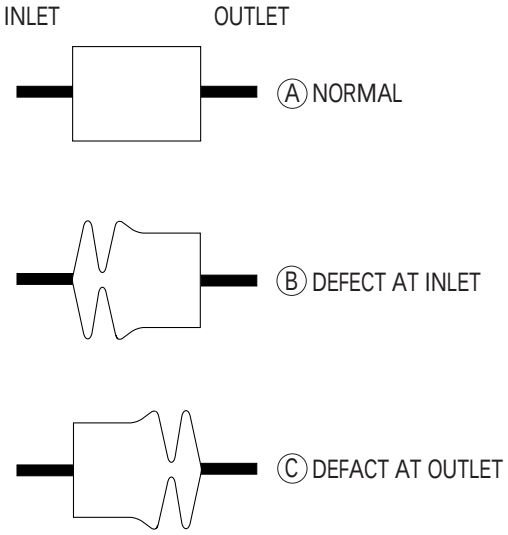


Fig. 4-7

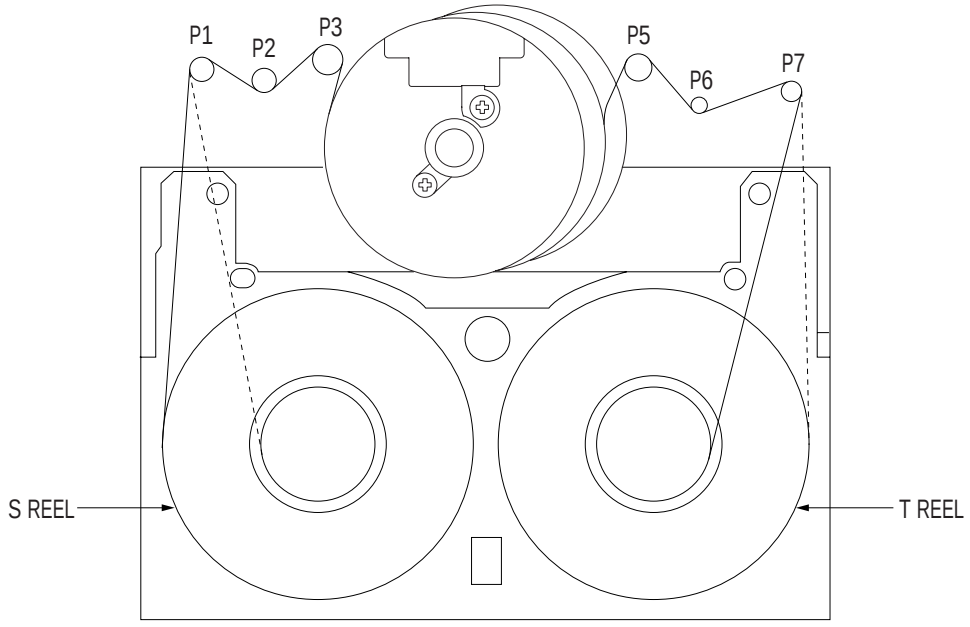


Fig. 4-8

4-5(b) Tracking adjustment

❶ Play Back the alignment tape.
❷ Turn P3 to flatten the waveform at the inlet.
❸ Turn P5 to flatten the waveform at the outlet.

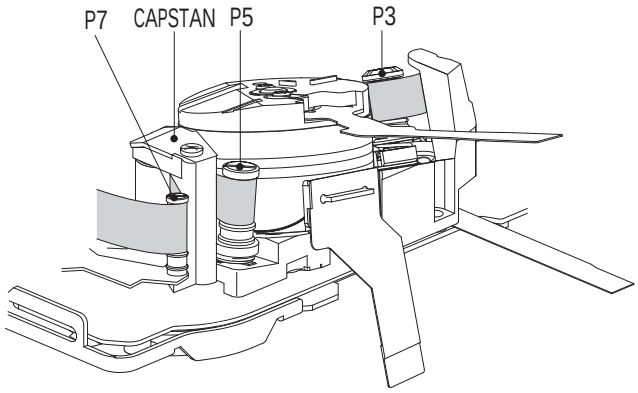


Fig. 4-9

4-5(c) P7 Adjustment

❶ Play back the alignment tape, and confirm that the tape is not twisted between the Guide Roller T and Capstan. (If the tape is twisted, turn P7, Fig. 4-10)
❷ Set to REV mode and observe the outlet waveform of PB RF signal. (Fig. 4-11)
❸ If the outlet waveform is out-of-spec, turn P7 counterclockwise, and redo steps 1 and 2.

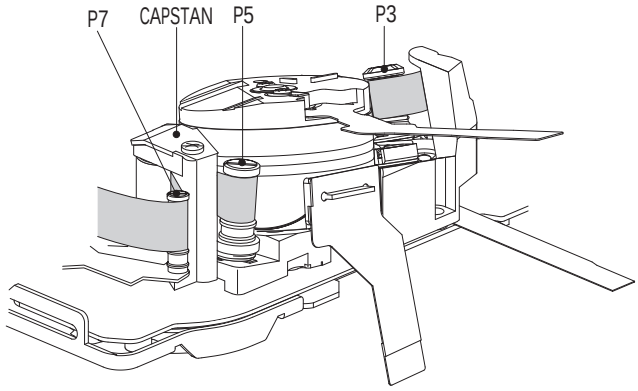


Fig. 4-10

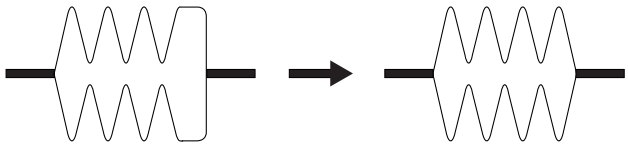


Fig. 4-11

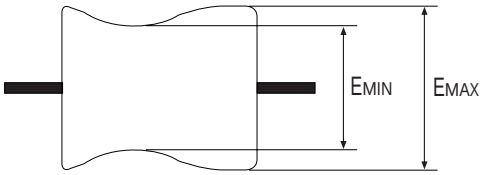
4-5(d) Check After Adjustment

1) Tracking Check

❶ Play back the alignment tape.

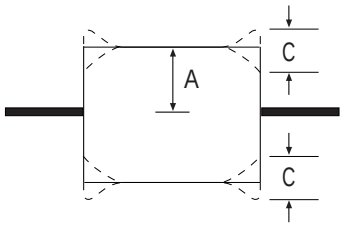
❷ Confirm that the minimum amplitude value(E min.)is 80% of the maximum value(E max.) or larger. (Fig. 4-12)

❸ Confirm that no large fluctuation occur on the waveform. (Fig. 4-13)



$$\frac{E_{MIN}}{E_{MAX}} \geqq 80(\%)$$

Fig. 4-12



$$C \leqq \frac{1}{8} A$$

Fig. 4-13

2) CUE and REV Check

❶ Play back the alignment tape, and set to REV mode.
Confirm that the waveform peaks have a uniform Pitch.(Fig. 4-14 A)
If the track pitch is not uniform, do section 4-5(b) (Tracking adjustment) and 4-5(c) (P7 adjustment).

❷ Set to CUE mode.
Confirm that the waveform peaks still have a uniform pitch. (Fig. 4-14 B)
If the track pitch is not uniform, do section 4-5(b) (Tracking Adjustment).

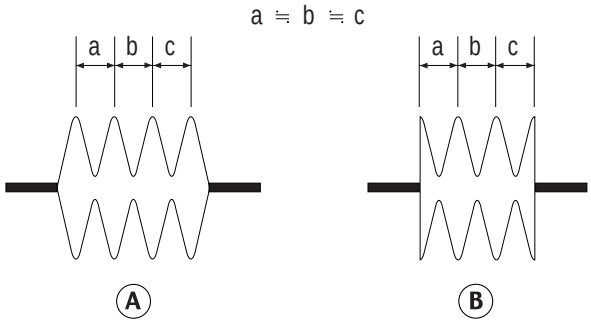


Fig. 4-14

3) Rise Time Check

❶ Play back the alignment tape.

❷ Set to playback mode, and confirm that the waveform of PB RF signal rises flat within 3 seconds. Also confirm that the tape is not twisted or curled around the Pinch Roller. (Fig. 4-15)

❸ Run the tape in CUE/REV and FF/REW modes, then playback. Confirm the waveform of PB RF signal rises flat within 3 seconds. Also confirm that the tape is not twisted or curled around the Pinch Roller.

❹ Repeat steps 2. and 3.

4) Tape Path Check

❶ In CUE and REV modes, check that the tape is not curled around the P1, P3, P5 upper flange and P7 upper/Lower flanges.

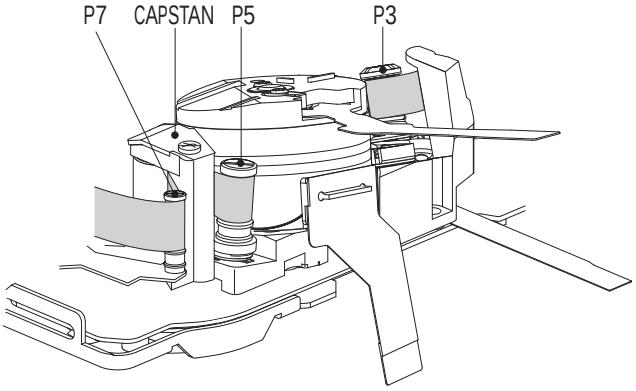


Fig. 4-15

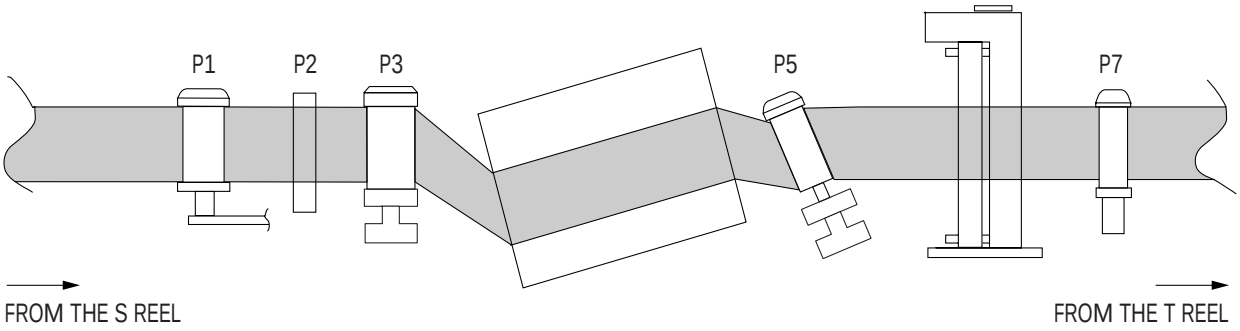


Fig. 4-16

MEMO